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MEERUT DIVISION.



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MEERUT DIVISION.

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MEERUT DIVISION.

Meerut Division.—A Division on the north-western border of the United Provinces, extending from the outer ranges of the Himālayas across the valley of the Dūn and its southern boundary, the Siwālik range, to the middle of the Doāb. It lies between 27° 29' and 31° 2' N. and 77° 3' and 78° 38' E., and is bounded throughout by the rivers JUMNA on the west and GANGES on the east. The headquarters of the Commissioner are at MEERUT. The total population of the Division has increased from 5,141,204 in 1881 to 5,326,833 in 1891 and 5,979,711 in 1901, and in the last decade the increase was greater than in any other Division of the Provinces. The total area is 11,302 square miles and the density of population 529 persons per square mile as compared with 445 for the Provinces as a whole. The Division is the fifth largest in area and the third in population. In 1901 Hindus numbered 75 per cent. of the population and Musalmāns 23 per cent.; other religions include Jains (37,941), Aryās (33,718), Christians (29,294, of whom 22,864 were natives), and Sikhs (4,148). The Division contains six Districts as shown below :—

District.	Area (square miles).	Population.	Land revenue and cesses, 1903-04 (in thousands of rupees).
Dehra Dūn ...	1,209	178,195	1,09,
Sahāranpur ...	2,228	1,045,230	17,76,
Muzaffarnagar ...	1,666	877,188	17,57,
Meerut ...	2,354	1,540,175	32,61,
Bulandshahr ...	1,899	1,138,101	23,31,
Aligarh ...	1,946	1,200,822	27,97,
Total ...	11,302	5,979,711	1,20,31,

Dehra Dūn lies chiefly between the Siwāliks and the Himālayas, stretching up into both ranges; Sahāranpur reaches the Siwāliks, but lies chiefly in the great plain, and the other Districts are entirely separated from the hills. The Division contains 112 towns and 7,713 villages. The largest towns are MEERUT (118,129 with Cantonments), ALIGARH (70,434), SAHĀRANPUR (66,254), HATHRAS (42,578), KHURJA (29,277), DEHRA (28,095 with Cantonments), HARDWAR-UNION (25,597), MUZAFFARNAGAR (23,444), and DEOBAND (20,167).

The chief places of commercial importance are Meerut Sahāranpur, Aligarh (Koīl), Hāthras, Khurja, and Muzaffarnagar, but many other smaller towns are important centres of the grain trade. HARDWAR and GARHMUKTESAR are famous for their religious associations. Hastināpur, now a tiny hamlet, is reputed to have been the headquarters of the Pāndava kingdom. At KALSĪ there is a rock inscription of Asoka; Baran or BULAND-SHAHR, ALIGARH or Koīl, and SARDHANA have special associations referred to in the articles on those places, while Meerut was the place where the great Mutiny broke out in northern India in May 1857.

Pound-
aries and
physical
aspects.

Dehra Dūn District.—A District in the Meerut Division, United Provinces, with an area of 1,209 square miles, lying between $29^{\circ} 57'$ and $31^{\circ} 2'$ N. and $77^{\circ} 35'$ and $78^{\circ} 20'$ E. It is bounded on the north-east by the Tehrī State; on the south-east by the Garhwāl District; on the north-west by the Sirmūr Rāwin, Taroch and Jubbāl States (Punjab); and on the south-west by the Sahāranpur District.

The District consists of two distinct portions. The greater part of it forms a gently sloping valley 45 miles long and 15 to 20 miles broad, between the HIMALAYAS and the SIWALIK hills, divided into two parts by a connecting ridge from which the eastern Dūn slopes down to the Ganges and the western Dūn to the Jumna. The scenery of these mountain dales can hardly be surpassed for picturesque beauty even among the lovely slopes of the massive chain to which they belong. On the north the outer range of the Himālayas rises abruptly to a height of 7,000 or 8,000 feet, with the hill station of MUSSOORIE and the cantonments of LANDOUR and CHAKRATĀ. The Siwālīks rise with a more gentle slope on the south-west of the valley, but fall away suddenly to the great plain of the DOAB. The other portion of the District is the Jaunsār-Bāwar *pargana* or Chakrātā *tahsīl*, which strikes north from the outer range of Himālayas between the valleys of the TONS and Jumna, and consists of a confused mass of ridges and spurs clothed with forest. The drainage of Jaunsār-Bāwar falls into the Tons or the Jumna, which unite where they penetrate the outer range of the Himālayas. The western Dūn is drained by the Asan which falls into the Jumna, and the eastern Dūn by a network of small

channels which meet and diverge, again and again, before they join the Ganges. Both the Jumna and Ganges are here rapid rivers pouring over beds of boulders in several channels with islands between.

The arboreal vegetation of the Siwāliks consists largely of Botany. species occurring both on the lower slopes of the Himālayas and in the hilly Districts of central and southern India. Epiphytic orchids are absent, and ferns are but few. The Himālayan long-leaved pine (*Pinus longifolia*) is also found, and the *sāl* (*Shorea robusta*) is here near its western limit and only appears in a stunted form. In the valley a rich vegetation is kept green throughout the whole year. The prevailing forest tree is *sāl*, and the flora is an interesting mixture of species found in the plains and of plants from the lower hills. In the Himālayas the vegetation gradually changes at higher elevations to European genera, and the cedar, silver spruce, and weeping pine are found.*

The Siwālik range is composed in its lower and southern-Geology. most parts of middle Siwālik soft sandstone or sand rock with a few thin mammalian fossil-bearing conglomerates, and along its crest of thick upper Siwālik conglomerates. These are all of fresh water origin and dip at low angles below the flat surface of the valley. The latter is a broad expanse of recent gravels and consolidated fans of scree derived from the higher ranges. On the north of the valley the middle and upper Siwāliks again emerge bent into sharp reversed folds with faulting against the older Himālayan series. The much-contorted outer Himālayan rocks include the slates and dark grey limestones or dolomites of the Mussoorie ridge, the Jaunsār series of dark slates, quartzites, fine volcanic ashes, and basic traps, the Deoban massive limestone which comes above the latter and forms much of the rugged elevated country north of Chakrātā, and finally the Māndhātā conglomerates and Bāwar quartz-schists, which lie flatly above both of the latter series. All these older rocks have proved unfossiliferous and are probably very old. Lead and sulphur mines are found on the Tons river at 30° 43' N., and gypsum in the limestones below Mussoorie.†

* Gazetteer of the Himālayan Districts, 1882, I, Chap. VII.

† H. S. Medlicott, Memo. Geol. Surv. of India, III, Pt. 2, and R. D. Oldham, Rec. Geol. Surv. of India, XVI, Pt. 4.

Fauna.

The District is singularly rich in animal life, though the game has been shot down lately. Wild elephants are found in the Siwāliks, and tigers, leopards, sloth bears, spotted and other deer, and monkeys are found in the forests. Among game birds may be mentioned the black and grey partridge, pea-fowl, florican, snipe, woodcock, pheasant, etc. The rivers abound in fish. Mahseer of 40lb to 60lb weight are frequently caught, and trout, *rohū*, and other varieties are found in the smaller rivers. The *gūnch* or freshwater shark is also common.

Climate
and tem-
perature.

Extremes of heat and cold in the valley are unknown. The proximity of the Himālayas cools the atmosphere; the hot blasts from the plains do not reach so far, while the heavy rains of the monsoon bring abundant showers, and even in May and June occasional rainfall refreshes the country. The eastern Dūn is feverish in the extreme, and is entirely deserted in the rainy season. The temperature in the valley ranges from 37° to 101°, while at Mussoorie it has a range from 27° to 81°.

Rainfall.

The average rainfall varies much from one part of the District to another. At Dehra it is 89 inches; at Rājpur near the foot of the Himālayas it is 121; at Mussoorie it is 96, and at Chakrātā 80. The fall for the whole District is 95 inches, and any approach to a real drought is unknown within the memory of man.

History.

In the earliest ages of the Hindu legends, Dehra Dūn formed part of the mythical region known as Kedārkhand, the abode of the great god Siva, whose sovereignty is still commemorated in the name of the Siwālik hills. Many generations later, according to the most ancient myths of the Aryan settlers, the valley became bound up with the two great epics of the Rāmāyana and Mahābhārata. Hither came Rāma and his brother, to do penance for the death of the demon-king, Rāvana; and here sojourned the five Pāndava brethren on their way to the inner recesses of the snowy range, where they finally immolated themselves upon the sacred peak of Mahā Panth. Another memorable legend connects the origin of the little river Suswā with the prayers of 60,000 pigmy Brāhmins, whom Indra, the rain-god, had laughed to scorn when he saw them vainly endeavouring to cross the vast lake formed by a cow's footprint filled with water. The

indignant pigmies set to work, by means of penance and mortifications, to create a second Indra who should supersede the reigning god; and when their sweat had collected into the existing river, the irreverent deity, alarmed at the surprising effect of their devotions, appeased their wrath through the good offices of Brahmā. Traditions of a snake, Bāmun, who became lord of the Dūn on the summit of the Nāgsidh Hill, seem to point towards a period of Nāgā supremacy. The famous Kālsī stone, near Haripur, on the right bank of Jumna, inscribed with an edict of the Buddhist emperor Asoka, may mark the ancient boundary between India and the Chinese empire. It consists of a large quartz boulder, standing on a ledge which overhangs the river, and is covered with the figure of an elephant, besides an inscription in the ordinary character of the period. Hiuen Tsiang does not mention any cities which can be identified as lying within the present District; and tradition asserts that it remained without inhabitants until the 11th century, when a passing caravan of Banjārās, struck with the beauty of the country, permanently settled on the spot.

Authentic history, however, knows nothing of Dehra Dūn till the 17th century, when it formed a portion of the Garhwāl kingdom. The town of Dehra owes its origin to the heretical Sikh Gurū, Rām Rai, a Hindu anti-pope, who was driven from the Punjab and the Sikh apostolate by doubts as to the legitimacy of his birth, and obtained recommendations from the emperor Aurangzeb to the Rājā of Garhwāl. His presence in the Dūn shortly attracted numerous devotees, and the village of Gurudwāra or Dehra grew up around the saint's abode. Rājā Fateh Sāh endowed his temple, a curious building of Muhammadan architecture, with the revenue of three estates. The Gurū possessed the singular and miraculous power of dying at will, and returning to life after a concerted interval; but on one occasion, having mistaken his reckoning, he never revived. The bed on which he died still forms a particular object of reverence to the devout worshippers at his cenotaph. Monuments of earlier date, erected by one Rānī Karnāvati, still exist at Nawādā. Fateh Sāh died soon after the arrival of Rām Rai, and was succeeded (1699) by his infant grandson,

Pratāp Sāh, whose reign extended over the greater part of a century. But the flourishing condition of his domain soon attracted the attention of Najib-ud-daula, governor of Sahāranpur, who crossed the Siwāliks with a Rohilla army in 1757, and occupied the Dūn without serious opposition. Under Najib Khān's benevolent and enlightened administration, the District rose to an unexampled degree of wealth and prosperity. Canals and wells irrigated the mountain-sides; Muhammadan colonists brought capital to develop the latent resources of the soils; and mango topes, still standing among primeval forest, bear witness even now to the flourishing agriculture of this happy period. But Najib's death in 1770 put an end to the sudden prosperity of the Dūn. Henceforth a perpetual inundation of Rājputs, Gūjars, Sikhs, and Gurkhas swept over the valley, till the once fertile garden degenerated again into a barren waste. Four Rājās followed one another on the throne; but the real masters were the turbulent tribes on every side, who levied constant black-mail from the unfortunate cultivators.

Meanwhile, the Gurkhas, a race of mixed Nepālī origin, were advancing westward, and reached at last the territories of Garhwāl. In 1803, Rājā Parduman Sāh fled before them from Srīnagar into the Dūn, and thence to Sahāranpur, while the savage Gurkha host overran the whole valley unopposed. Their occupation of Dehra Dūn coincided in time with the British entry into Sahāranpur, and the great earthquake of 1803 proved the miraculous harbinger of either event. The Gurkhas ruled their new acquisition with a rod of iron, so that the District threatened to become an absolute desert. Under the severe fiscal arrangements of the Gurkha governors, slavery increased with frightful rapidity, every defaulter being condemned to lifelong bondage, and slaves being far cheaper in the market than horses or camels. From this unhappy condition the advent of the British rule rescued the feeble and degraded people.

The constant aggressions of the Gurkhas against our frontier compelled the Government to declare war in November 1814. Dehra was immediately occupied, while our forces laid siege to the hill fortress of Nālāpāni or KALANGA which

fell after a gallant defence, with great loss to the besieging party. The remnant of its brave garrison entered the service of Ranjit Singh, and afterwards died to a man in battle with the Afghāns. A resolution of Government, dated 17th November, 1815, ordered the annexation of our new possession to Sahāranpur; while the Gurkhas, by a treaty drawn up in the succeeding month, formally ceded the country. The organization of the District on the British model proceeded rapidly; and in spite of an ineffectual rising of the disaffected Gūjars and other predatory classes led by a bandit named Kalwā, in 1824, peace was never again seriously disturbed. Under the energy and perseverance of its first English officials, the Dūn rapidly recovered its prosperity. Roads and canals were constructed; cultivation spread over the waste lands; and the people themselves, awaking from their previous apathy, began to acquire habits of industry and self-reliance. Jaunsār-Bāwar, now included in the Chakrātā *tahsīl*, historically an integral portion of Sirmūr, had been conquered in the same campaign as the Dūn; but was at first erected into a separate charge under a Commissioner subordinate to the Resident of Delhi. In 1829, however, it was incorporated with the present District, of which it has ever since formed a part. The Mutiny of 1857 produced little effect in this remote dependency, cut off by the Siwālīks from direct contact with the centres of disaffection in the Doāb or the Delhi Division; and though a party of Jullundur insurgents, 600 strong, crossed the Jumna into Dehra Dūn, they traversed the District without stopping, and never came into collision with the pursuing troops.

The Asoka inscription at Kālsī has already been referred to. ^{Archæology.} It is of great interest as preserving the names of the kings of western countries who were contemporaries of Asoka. At Madhā on the Jumna, 25 miles north-east of Kālsī, some old temples and interesting remains are found. The chief temple, called Lakkha Mandir, contains two inscriptions which, though undated, probably belong to about 600 to 800 A.D. One of the inscriptions refers to the founding of a temple by a princess of Jullundur in the Punjab.* An old temple at Rikhikesh, on the Ganges, is said

* *Epigraphia Indica*, I, p. 10.

to have been built by Sankarāchārya, and marks a stage on the pilgrim route to Badrī Nāth.

The
people.

The number of towns in the District is 6 and of villages 416. The population at each census in the last 30 years has been: 1872, 116,945; 1881, 144,070; 1891, 168,135; 1901, 178,195. The District is divided into two *tahsils*, DEHRA and CHAKRATA, the headquarters towns in which bear the same names. The chief towns are the municipalities of DEHRA and MUSSOORIE. There are three cantonments at Dehra, LANDOUR (adjoining Mussoorie), and CHAKRATA.

The principal statistics of population in 1901 are shown below:—

<i>Tahsīl.</i>	Area in square miles.	Number of—		Popula- tion.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Dehra ...	731	4	377	127,094	174	+ 7.6	12,188
Chakrātā ...	478	2	39	51,101	107	+ .8	393
District Total...	1,209	6	416	178,195	147	+ 5.9	12,581

Of the total population 83 per cent. are Hindus, 14 per cent. Musalmāns, 1.8 per cent. Christians, and .8 per cent. Aryās.

Caste
and oc-
cupation.

The most numerous caste is that of Rājputs, who number 32,000 or more than one-fifth of the total number of Hindus (148,000), which is a high percentage for this caste. Chamārs (leather workers and labourers) number 21,000, Brāhmans, 17,000, and Korīs (weavers and labourers), 12,000. Out of a Muhamadan population of 25,000, Shaikhs number 8,000 and Pathāns 5,000. In the hill tracts of the District, Brāhmans and Rājputs are divided, as in Kumaun, into the Khas branch, and the ordinary divisions of these castes, the former being looked on as aboriginal. Among the Khas Rājputs polyandry is commonly practised; of other castes peculiar to the District may be mentioned the Bājgis (singers and musicians; 6,000) and the Doms (aborigines, now labourers; 8,000).

Christian
Missions.

The number of native Christians is only 1,305, while there are 1,829 Europeans and Eurasians. The principal missions

with the dates of their foundation are those of the American Reformed Presbyterian Church at Dehra (1852) and Rājpur (1868); the Church Missionary Society at Annfield and 2 out-stations (1857) and the Methodist Episcopal Church at Mussoorie and 6 out-stations (1859). Nearly half the native Christians belong to the last named.

In the hills tillage is chiefly confined to the valleys or to terraces on the mountain slopes artificially irrigated by dams and canals. In the valley agriculture is carried on much as it is in the plains; but the Dūn cultivator, except in the Dehra plateau, is wanting in energy and skill. His cattle are weak, the holdings are small, and methods are rude. There is some fine land in the eastern Dūn; but the valley as a whole is not a good wheat country, and rain crops and crops with long taproots do best. The surface soil is, as a rule, shallow, and below it lies a gravel sub-soil which soon drains away the moisture from the upper layers. The ordinary crop seasons in the valley are the same as in the plains, but harvest is a month or two later.

The main agricultural statistics for 1903-04 are given below, in square miles:—

<i>Tahsīl.</i>	Total.	Cultivated.	Irrigated.	Culturable waste.	Forests.
Dehra ...	731	122	35	139	278
Chakrātā ...	478	31	2	7	142
Total ...	1,209	153	37	146	420

The staple food grains are wheat, rice, *marua*, and barley; the areas in square miles under which in 1903-04 were 54, 32, 22, and 16, or 35, 24, 15, and 11 per cent. of the whole. Maize, *gram*, and *jowār* are also important food crops and covered an area of 15 square miles. Oilseeds were grown in 10 square miles, and tea plantations included eight square miles. In the hills ginger, turmeric, and chillies are valuable crops.

The District does not produce any surplus of grain for export, and there is in fact a considerable import, especially since the growth of Mussoorie and the extension of the railway.

General
agricultural
conditions.

Chief
agricultural
statistics
and
crops.

Improvements in
agricultural
practice.

Dams made of wooden frames filled with boulders have been successfully used to prevent erosion by torrents. The tea industry is not very flourishing owing to the loss of the market in Afghānistān and Central Asia. Experiments in the cultivation of rhea fibre and in sericulture have not proved a success, and grants of waste land to European settlers have not been remunerative, largely owing to the difficulty of obtaining labour. Very few advances are taken under the Agriculturists' Loans Act; the amount lent in 1902 was only Rs. 5,000, and usually there are no loans. No money has been borrowed under the Land Improvement Act.

Cattle,
ponies,
and
sheep.

There are no special breeds of cattle or horses. Cattle-breeding has been tried without success, and an attempt to improve the breed of sheep also failed. Goats are kept in very large numbers, and are penned on the land in the hills to supply manure. Owing to its cool climate, Dehra is a favourite place for keeping racing stables in the hot weather.

Irriga-
tion.

Of the total cultivated area 22 square miles are irrigated from Government canals and 15 from rivers and small reservoirs made by damming streams. There are only 29 wells in the whole District, and the canals supply drinking water as well as irrigation. The canals are small works and are improvements and restorations of watercourses made long before British rule. The principal channels are the Bijāpur drawn from the lesser Tons, a small stream, in the centre of the valley; the Katāpāthar from the Jumna; and the Rājpur, Kalanga, and Jākhan from streams in the eastern Dūn. The first of these was made as early as 1839. Till 1903 these canals were supplied by means of temporary dams, but permanent heads have now been made. Owing to the steep slopes and nature of the soil erosion and percolation made masonry channels necessary; but the slopes are being reduced by providing falls, and the cost of extensions will be smaller. The total capital expenditure to the end of 1903-04 was 8 lakhs, and in that year the gross income was 1.1 lakh, and expenditure Rs. 70,000, giving a profit of 4.7 per cent. Wheat and rice are the main crops irrigated. Irrigation in the hills is carried on by small channels taken out of rivers at the head of a valley, which distribute the water to terraces.

The reserved forests in Dehra Dūn cover an area of 420 Forests. square miles. They form two divisions, each in charge of a Deputy Conservator, the Dehra Dūn division, 278 square miles, with headquarters at Dehra, and the Jaunsār division, 142 square miles, with headquarters at Chakrātā. In the Dūn proper the forests are largely *sāl* with *haldī* (*Adina cordifolia*), *ānā* (*Phyllanthus emblica*), *bahera* (*Terminalia bellerica*), and many other varieties. On stiff clayey soil *sain* (*Terminalia tomentosa*) and *jāmun* (*Eugenia jambolana*) are found. Bamboos are rare here, but are found on the northern slopes of the Siwāliks. Near the rivers *khair* (*Acacia catechu*) and *shisham* (*Dalbergia sissoo*) are common. On the ridges and slopes of the Siwāliks the long-leaved pine, and the *sāter* (*Boswellia thurifera*) and *khat-bilāwa* (*Buchanania latifolia*) are common. In Jaunsār valuable timber trees, such as *chūr* (*Pinus longifolia*), *kail* (*Pinus excelsa*), and *deodārs* are the principal forest trees. Timber is extracted and transported to the Jumna by means of long slides made of planks, which are kept wet. The timber is then formed into rafts and floated down to Delhi. Among the minor forest products may be mentioned resin and colophony. In 1903 the total forest revenue in these two divisions, which also include some forests leased from the Tehrī, Sirmūr, and other hill States amounted to 7.5 lakhs, and the expenditure to 3.1 lakhs.

The geology of the District has already been described. Minerals. The minerals have not yet been proved to be of any economic value. The stone of the Siwāliks is of little use for building. Limestone is plentiful, and lime is made as required.

There are two breweries at Mussoorie which employed 131 Art and Manufactures. hands in 1903, and one at Chakrātā which employed 30, the total production being 684,000 gallons. Glass-blowing from European glass has been practised for some time, and in 1902 a small glass factory was opened at RAJPUT. There are no other manufactures except a little cotton-weaving.

The exports to the plains include timber, bamboos, lime, Charcoal, rice, and tea. The production of tea in 1903 amounted to 1.6 million lb. or nearly 78 per cent. of the total produce of the United Provinces. In return the Dūn imports hardware, cotton cloth, blankets, salt, sugar, grain, tobacco, and spices.

All these articles pass on to the hills ; while the return trade consists of rice, ginger, turmeric, red pepper, honey, wax, lac, gum, resin, and other forest produce. Up to 1900, when the railway was opened, the main trade route was the metalled road from Sahāranpur to Dehra, which pierced the Siwāliks by the Mohan Pass and crossed the valley from south to north.

Railways
and
Roads.

The Hardwār-Dehra Railway is a continuation of the branch line of the Oudh and Rohilkhand Railway from Laksar on the main line to Hardwār ; it enters the District at the south-east corner, passes up the eastern Dūn, and terminates at Dehra, the total length being 48 miles.

There are two main lines of metalled road communicating with the plains. One leads from Sahāranpur to Chakrātā, crossing the Siwāliks by the Timli Pass, and then traversing the western Dūn ; it is purely a military route. The other was the main route from the valley to the plains before the opening of the railway. It pierced the Siwāliks by the Mohan Pass and crossed the centre of the valley to Dehra and thence to Rājpur at the foot of the hills below Mussoorie. A third metalled road from Dehra joins the Sahāranpur-Chakrātā road at Fatehpur. The eastern Dūn is very badly provided with roads, and for a great portion of the rainy season the northern part is cut off from the rest of the District.

The total length of metalled roads is 54 miles, of which all but 11 miles are maintained by the Public Works department. There are 272 miles of unmetalled roads, of which 200 are maintained by the Public Works department at the cost of the District board. Avenues are maintained on 12 miles.

District
sub-
divisions
and staff.

The chief administrative officer of Dehra Dūn is called the Superintendent, and in 1904 he was assisted by 2 members of the Indian Civil Service, called Assistant Superintendents, and one Deputy Collector recruited in India. There is a *tahsildār* at Dehra and another at Chakrātā. The District staff in other departments consists of the usual officers, but there is also a Cantonment Magistrate at Chakrātā, and the station staff officers at Dehra Dūn and Landour are *ex officio* Cantonment Magistrates. DEHRA is the headquarters of the School Circle of the Forest department and also of several Imperial departments.

The District has a special organization of civil courts. The Civil Superintendent is a Civil Judge for Jaunsār-Bāwar, and the Cantonment Magistrate of Chakrātā has power of a Judge of Small Cause Court in the same area. One of the Assistant Superintendents has powers of a Subordinate Judge and Judge of Small Cause Court in the rest of the District, which belongs to the Civil Judgeship and Sessions Division of Sahāranpur. Crime is not very important, and the principal offences are ordinary theft and burglary. The Chakrātā *tahsil* is particularly free from crime.

The settlement of the land revenue in the valley has always been distinct from that of Chakrātā. In the former conditions resembled those of the plains, while in the latter the Kumaun system was in force.

After the Dūn was annexed in 1815 the Government demand was calculated at the time of harvest by an appraisal of the crop, one-half or one-third, and in some cases one-fourth being taken. In 1816 a new settlement was made for four years based on the average collections of the previous two years. This was followed by two quinquennial settlements, in the second of which the revenue-payers were for the first time recognised as owning the land instead of being merely farmers or tenants-at-will. In 1831 the fourth settlement was made for 10 years and the recently-created rights were swept away. The cultivators received a grant of proprietary rights, and a few of the late *zamīndārs* whose ancestors had held the same position were appointed *mukaddams* or managers to collect the revenue and pay it to Government less ten per cent. commission. The *mukaddams* were regarded as officials and were liable to removal for misconduct. The cultivators in many cases did not realize their new position and continued to pay rent as before. In 1837-38, however, the grant of land on more favourable terms to European settlers caused a rise in the value of land, and the system led to difficulties. The Dūn was surveyed in 1838-39, the boundaries of all villages were determined, and one-fourth of the culturable land included in each was assigned to the cultivators free for grazing, while the remainder was offered first to cultivators and then to other applicants as grants on indefinite terms. In 1840 the Superintendent

proposed another *ryotwāri* settlement for 20 years, but it was not sanctioned. Both of these settlements were made at a uniform rate per acre, the distribution being left to the people; but the absence of joint responsibility prevented this from being done fairly, and there were other complaints. Accordingly in 1845 the preparation of a regular record-of-rights was commenced, assessments were lowered, tenures enquired into, and *zamīndāri* rights conferred on the old revenue-payers where their claims were proved. The revision was completed in 1848, and re-established the *zamīndāri* system. The seventh settlement was made between 1860 and 1863. It was revised in 1865 with a view to making it permanent; but this project was never carried out, and the settlement expired in 1886, when a fresh settlement was made for 20 years. The revenue then assessed varied in different tracts from 13 annas to R. 1-14-0 per cultivated acre, the average being R. 1. The demand amounted to 45 per cent. of the recorded assets.

Chakrātā.

In Chakrātā the conditions have been totally different. Five short-term settlements were made for periods of 2, 3 or 5 years up to 1834 in the following manner. The total assessment on the whole *tahsīl* was fixed at each from a consideration of the previous demand, and a rough idea of the existing circumstances of the people and their trade. This was announced to the *chauntra* or four representatives of the people. The *chauntra* then discussed the settlement with the *siānās* or headmen of the 35 *khatts* into which the *pargana* was divided, and these distributed the demand over villages in consultation with the village *siānās*. A sixth settlement on the same principle was made in 1834, but it broke down owing to quarrels between the *chauntra* and the subordinate officials. The new settlement sanctioned for 10 years from 1839 accordingly set aside the *chauntra* completely and treated each *khatt* as a *bhaviyāchārā mahāl** in the plains. The assessment was based on a careful inquiry into the comparative resources of each village, and the revenue was fixed for each *khatt*, the *siānā* being responsible for the collection, and distributing the fixed revenue annually. The cultivated lands are not the only basis of distribution; the number of cattle, working hands, and the general wealth of each

* *Vide Land Revenue in article on United Provinces.*

shareholder are also considered. A plane table measurement was first made at the next revision in 1860 ; but there are no fixed village boundaries. The settlement of 1860 lasted for about 10 years and was followed by another for the same term. In 1884 this was revised and extended for 20 years.

The total revenue receipts in the District have varied as shown below (in thousands of rupees) :—

	1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	62,	85,	92,	92,
Total revenue	2,82,	3,31,	4,43,	5,15,

The District contains two municipalities, DEHRA and MUS-^{Local self-govern-} SOORIE, and two towns administered under Act XX of 1856, ^{ment.} RAJPUR and KALSI. The total income of the District board in 1903-04 was Rs. 61,000, of which only Rs. 5,400 came from local rates, the greater part of the income being a grant from Government. The expenditure was Rs. 62,000, of which Rs. 30,000 were spent on civil works.

The District Superintendent of Police has a force of three ^{Police} inspectors, 50 subordinate officers, and 178 constables. Municipal ^{and Jails.} police number 59, town police 7, and rural and road police 10. There are seven police-stations and one jail with a daily average population in 1903 of 62 males and one female.

In 1901 the proportion of persons who could read and ^{Educa-} write was 7.1 per cent. (10.7 males and 2 females). This ^{tion.} is higher than in any other District in the Provinces, and is partly due to the comparatively large number of Europeans and Eurasians who have settled here. The number of public schools increased from 39 with 1,240 pupils in 1880-81 to 47 with 2,404 pupils in 1900-01. In 1903-04 there were 60 such institutions with 2,854 pupils, of whom 311 were girls, besides 13 private establishments with 289 pupils. One school is managed by Government and 41 by the District and municipal boards. The total cost was Rs. 43,000, of which Rs. 16,000 were met from local funds and Rs. 10,000 from fees. These were all schools for natives, but there were also 14 private schools for Europeans and Eurasians in Mussoorie, four of which contained college

classes. The total number of children under instruction in these schools was 1,200.

Hospitals
and
dispensaries.

In 1903 there were 11 hospitals and dispensaries with accommodation for 78 in-patients. The number of in-door patients was 1,435 out of a total of 60,779 relieved, and 2,733 operations were performed. The income was Rs. 14,000, chiefly from local funds.

Vaccination.

The number of persons successfully vaccinated in 1903-04 was 7,300 or 40·1 per 1,000 of the total population. Vaccination is only compulsory in the municipalities and cantonments.

(G. R. C. Williams, *Memoir of Dehra Dūn*, 1874; F. Baker, *Settlement Report*, 1886.)

Dehra Tahsīl.—A *tahsīl* in the Dehra Dūn District, United Provinces, lying between 29° 57' and 30° 32' N. and 77° 28' and 78° 18' E., with an area of 731 square miles. The *tahsīl* is divided into two *parganas* called the eastern and western Dūn, and includes the whole of the valley between the Himālayas and Siwāliks from the Jumna to the Ganges, stretching up to the crest of the Siwāliks on the south and the outer range of the Himālayas on the north. Its population rose from 117,438 in 1891 to 127,094 in 1901. It contains 4 towns: DEHRA, the District and *tahsīl* headquarters, population 28,095, MUSSOORIE, with the adjoining cantonment of LANDOUR, and RAJPUR, 2,900, and 377 villages. In 1903-04 the demand on account of land revenue and cesses amounted to Rs. 69,000 and Rs. 13,000 respectively. The population is sparse, 174 to the square mile, as there is a large forest area, the cultivated area being only about 122 square miles, of which 35 are irrigated. There are 15 large tea gardens in the *tahsīl* beside a number of smaller estates.

Chakrātā Tahsīl (*Chakrautā*).—The northern *tahsīl* of the Dehra Dūn District in the United Provinces, better known under its earlier name of Jaunsār-Bāwar. It lies between 30° 31' and 31° 2' N. and 77° 42' and 78° 5' E., and forms a roughly elliptical mass of mountains, stretching due north from the outer range of the Himālayas. The southern half of the *tahsīl* lies between the Tons (north) and Jumna rivers. The whole tract is so hilly that in its entire area of 478 square miles scarcely a single level spot of a hundred yards occurs anywhere and only

about 31 square miles are cultivated. The population rose from 50,697 in 1891 to 51,101 in 1901. The *tahsīl* contains 2 towns, the cantonment of CHAKRATA, population 1,250, and the small town of KALSĪ, 760, which is administered under Act XX of 1856. There are 39 *khatts* or revenue divisions and several hundred inhabited sites. In 1903-04 the land revenue demand was Rs. 23,400, and that for cesses Rs. 3,800. The low density of population, only 107 to the square mile, is usual in the Himālayan tract. The average rainfall is 80 inches at Chakrātā, and is slightly lower than that of the rest of the District. The inhabitants resemble those of the neighbouring Himālayan tracts, and differ from those in the plains. Polyandry of the patriarchal type is common. The Jaunsār-Bāwar Forest division has an area of 142 square miles, and is managed jointly with 153 square miles of forests leased from the neighbouring native States. The forests contain very valuable timber trees, especially *deodār* and various kinds of pines. Railway sleepers and other timber are transported to the Jumna by an ingenious system of slides, and then floated down to Delhi. The provisions of the Excise Act of 1896 are relaxed, except in the towns of Chakrātā and Kālsī, and the inhabitants are allowed to make spirits and fermented liquor for their own use. There is also a small cultivation of poppy which is not controlled, but this privilege will expire with the present settlement.

Chakrātā Town (*Chakrantā*).—Cantonment and *tahsīl* headquarters in the Dehra Dūn District, United Provinces (30° 42' N. and 73° 52' E.). The cold weather population has varied since 1872 between 1,200 and 1,500 and was 1,250 in 1901. The present garrison consists of a regiment of British infantry, and there is a standing camp at Kailāna, a short distance east of Chakrātā, where details from various regiments are stationed. In September 1900 the troops numbered 1,716 with women and children, and the total population was 5,417. The cantonment was founded in 1866 and first occupied in 1869. It is situated at an elevation of 6,885 feet above the sea, 25 miles from Kālsī and 40 miles west of Mussoorie along the hills. A fine cart-road 77 miles long connects the station with Sahāranpur, a branch from which passes along the valley of the Dūn to Dehra. The income

and expenditure of the cantonment fund are about Rs. 16,000 annually. A brewery is established here, the number of hands employed in 1903 being 30, and the outturn 88,000 gallons.

Dehra Town.—Headquarters of the District and *tahsīl* of the same name in the United Provinces, situated in 30° 19' N. and 78° 2' E., at an elevation of 2,300 feet above the sea. It is the terminus of the Hardwar-Dehra (Company) Railway, which meets a branch of the Oudh and Rohilkhand, and also lies on the main road from the plains to the hill station of Mussoorie. The population including both municipality and cantonment has increased from 7,316 in 1872 to 18,959 in 1881; 25,684 in 1891; and 28,095 in 1901. In 1901 Hindus numbered 18,246, Muhammadans 8,047, and Christians 1,100, most of whom were Europeans.

The town was founded by Gurū Rām Rai, the originator of the Udāsī sect of ascetics, early in the 18th century, after his failure to obtain the recognition of his claims to be made Gurū of the Sikhs. The temple of the Gurū, built in 1699, consists of a central block, designed on the model of the emperor Jahāngīr's tomb, in which the Gurū's bed is still preserved, and smaller monuments at the corners in memory of his wives. These are of brick, plastered over and pointed. The plaster of the large outer gateway has recently been adorned with paintings, which present a curious mixture of religious and historical subjects and portraits, including one of a former Superintendent of the Dūn. These are the work of a self-taught local mason and are of fair artistic merit. Three reservoirs, one being 230 feet long and 184 feet wide, are attached to the temple.

Dehra is the cold weather headquarters of the District staff, most of the members of which in the hot weather spend part of each month at Mussoorie. One Assistant Superintendent is permanently posted at Dehra. It is also the headquarters of the Trigonometrical and Forest Surveys of India, and of the Agricultural Chemist and Cryptogamic Botanist to the Government of India. The finest public building is the Forest School, which contains a magnificent collection of forest products and models of mechanical devices used in forestry, besides a natural history museum. The Conservator of Forests, School Circle, and a staff of professors train the students, and the school supplies

subordinate forest officials to all parts of India. The members of the Imperial Cadet Corps reside at Dehra during their period of training, and in the hot weather the Viceroy's body-guard and private stables are kept here. The ex-Amīr of Afghānistān has a house at Dehra, and the former prime minister of Nepāl lives at Jharipānī.

The municipality, which was established in 1867, had a population of 24,039 in 1901, and the average receipts and expenditure from 1891 to 1901 were Rs. 28,000 and Rs. 33,000. A loan of Rs. 91,000 for water-works made in 1895-96 is excluded from the receipts. In 1903-04 the figures were Rs. 59,000 and Rs. 55,000. The greater part of the income is derived from octroi (Rs. 41,000) which has recently been imposed in place of a house tax. The water-supply is derived partly from Kolūkhet in the Himālayas by means of a pipe several miles long, and partly from Nālāpānī on the KALANGA hill. An increase in the supply is under consideration, while a complete system of surface drainage is being constructed.

There are no manufactures in Dehra, and the population chiefly depends on the position of the town as a depôt for the trade with the hills, and as the headquarters of the District. In 1904 Dehra contained 13 schools with 1,100 pupils.

The cantonment is the headquarters of two battalions of Gurkhas and has a total population of 4,056. In 1903-04 the income was Rs. 2,300 and the expenditure Rs. 1,500.

Kalanga.—A hill in Dehra Dūn District, United Provinces ($30^{\circ} 20' N.$ and $78^{\circ} 5' E.$). A fort was hastily thrown up here by the Gurkhas on the outbreak of the Gurkha war of 1814. It is perched on a low spur of the Himālayas, $3\frac{1}{2}$ miles north-east of Dehra, and was attacked in 1815 by General Gillespie, who fell while leading the storming party; for a time it was desperately defended, but the enemy evacuated it after a second assault, and the British demolished it shortly after. A plain white stone monument commemorates those who fell at the taking of the fort. On the slope of the hill is a village called Nālāpānī, near which is a celebrated spring which forms part of the water-supply of Dehra.

Kālsī.—A town in the Chakrātā *tahsīl* of the Dehra Dūn District, United Provinces ($30^{\circ} 32' N.$ and $77^{\circ} 51' E.$). It is

situated close to the junction of the Jumna and the Tons, on the military road from Sahāranpur to Chakrātā and is 52 miles from the former and 25 miles from the latter. Three miles away the road crosses the Jumna by a fine iron girder bridge. Population (1901) 760. The place has declined owing to the transfer of the *tahsīl* headquarters to Chakrātā. Kālsī is administered under Act XX of 1856, the annual income and expenditure amounting to Rs. 300 or Rs. 400. It is chiefly remarkable for a large quartz boulder in the neighbourhood on which are sculptured the celebrated 14 edicts of Asoka, one of which gives the names of contemporary kings in western Asia, Greece, and Africa.*

Landour (*Landhaur*).—A hill cantonment and sanitarium in the Dehra Dūn District, United Provinces (30° 27' N. and 78° 7' E.). Population in the cold weather (1901) 1,720. In September, 1900, the population was 3,711, of whom 1,516 were Christians. A convalescent station for European soldiers was established in 1827, the year after MUSSOORIE, which adjoins Landour, was founded. The cantonment contains a large school for Europeans and Eurasians with college classes.

Mussoorie (*Mansūri*).—Municipality and sanitarium in the Dehra Dūn District, United Provinces (30° 27' N. and 78° 5' E.). The town stands on a ridge of the outer Himālayas at a height of 6,000 to 7,500 feet above sea-level, among beautiful and varied mountain scenery, and forms practically one town with LANDOUR, where there is a convalescent depôt for troops. The population of the municipality and cantonment in the cold weather has varied from 2,753 in 1872, to 4,852 in 1881, 7,175 in 1891, and 6,461 in 1901. In the hot weather the population within municipal limits was 14,689 in 1900, of whom 7,420 were Hindus, 3,424 Musalmāns, and 3,660 Christians (mostly Europeans and Eurasians). The cantonment population was 3,711, of whom 1,516 were Christians.

Mussoorie became a sanitarium in 1826, the year before Landour was made a convalescent depôt for troops, and has gradually become one of the most popular health resorts in upper India. Up to 1900 it was reached by road from Sahāranpur, 58 miles away, but the opening of the Hardwār-Dehra Railway has

* *Corpus Inscriptionum Indicarum*, I, pp. 12 and 117.

made it more accessible. Dehra is about 7 miles from RAJPUR at the foot of the hills, from which Mussoorie is reached by a bridle-path 7 miles long or by a cart-road of 14 miles. In the hot weather the members of the District staff reside for part of each month at Mussoorie, and it is the summer headquarters of field parties of the Trigonometrical Survey of India. The Mussoorie municipality was constituted in 1850. In the 10 years ending 1901 the average annual receipts have been Rs. 71,800, besides loans from Government, amounting to Rs. 1,16,000, for water-works and sewerage. In 1903-04 the receipts were 1·6 lakhs, including tax on houses and land (Rs. 32,000), tolls (Rs. 50,000), conservancy tax (Rs. 19,000), and expenditure 1·4 lakh, including conservancy (Rs. 28,000), water-supply (Rs. 13,000), general administration (Rs. 22,000), roads (Rs. 26,000), interest and debt (Rs. 7,000). The Bhilārū sewage shoot for the disposal of refuse is the most important sanitary work, carried out recently at a cost of Rs. 70,000; schemes for an improved water-supply and electric lighting are now under consideration.

Mussoorie exists chiefly as a health resort, and the only manufacture is that of beer in two breweries, which employed 131 men in 1903 and made nearly half a million gallons of beer. It is of great importance as an educational centre for European and Eurasian children, and there are nine schools for boys and five for girls of these classes, with about 600 boarders and 200 day-scholars, besides a school in Landour. A Roman Catholic Cathedral is under construction.

Rājpur.—Town in the Dehra Dūn District, United Provinces (30° 24' N. and 78° 6' E.). It is situated at the foot of the Himālayas on the main road to MUSSOORIE, being 7 miles from that place and 7 miles from Dehra. Population (1901) 2,900. The place is chiefly of importance as a stage on the journey to Mussoorie, and it is administered under Act XX of 1856. Pure drinking water is supplied through pipes from the Himālayas. There are 3 hotels, a police-station, post-office, and dispensary. In 1902 a small glass factory was opened here. Glass is made from quartz, limestone, and soda, the two first materials being found in the neighbourhood. Four European workmen and 44 natives were employed in 1903.

Boundaries, configuration, and hill and river systems.

Sahāranpur District.—District in the Meerut Division of the United Provinces, with an area of 2,228 square miles, lying between $29^{\circ} 34'$ and $30^{\circ} 24'$ N. and $77^{\circ} 7'$ and $78^{\circ} 12'$ E. It is bounded on the north by the Siwālik hills, which separate it from Dehra Dūn District; on the east by the Ganges, dividing it from Bijnor District; on the south by Muzaffarnagar District; and on the west by the river Jumna, separating it from the Punjab Districts of Karnāl and Ambāla. Sahāranpur forms the most northerly portion of the DOAB or alluvial plain between the Ganges and Jumna. On its northern boundary the Siwāliks rise abruptly, pierced by several passes and crowned by jagged summits which often assume the most fantastic shapes. At their base stretches a wild submontane tract (*ghār*), overgrown with forest or jungle, and scored by the rocky beds of innumerable mountain streams (*raos*). South of this forest belt lies the plain, an elevated upland tract flanked on both sides by the broad alluvial plains which lie in the valleys of the Jumna and Ganges. Besides the two great rivers there are many smaller streams. Excluding arms of the Jumna and Ganges, these fall into two classes, *viz.* those which are formed by the junction of the torrent beds issuing from the Siwāliks, and those which rise in various depressions and swamps. Though the *raos* are sometimes dry during the greater part of the year, their channels lower down gradually assume the form of rivers, and contain water even in the hot weather. Chief among these rivers may be mentioned the HINDAN, which rises in the centre of the Siwāliks and after crossing several Districts joins the Jumna, and the SOLANI, lying further to the east and falling into the Ganges in Muzaffarnagar District.

Botany.

The natural flora of the District forms two groups, the luxuriant tropical forest trees and plants of the Siwālik slopes, and the products of the plains which resemble those of other Districts. The botanical gardens at Sahāranpur form an important centre for the distribution of plants and are also the headquarters of the Botanical Survey of northern India. The District is noted for the production of excellent fruit of European varieties, especially peaches.

Geology.

The geology of the SIWALIKS has been dealt with in the description of those hills. They consist of three main divisions, (1) the upper Siwālik conglomerates sands and clays, (2) the

middle Siwālik sand-rock, and (3) the lower Siwālik or Nāhan sandstone. The middle and upper rock stages have yielded a magnificent series of fossils, chiefly mammalian.* The *ghār* or belt below the Siwāliks consists of *débris* from the hills with a shallow light soil resting on boulders. The prevailing soil in the plain is a productive loam, which stiffens into clay in depressions, while along the crests of slopes it merges into sand.

Tigers are still fairly numerous in the Siwālik and sub-Fauna. montane forests, and are found more rarely in the Ganges *khādar*. Leopards, wolves, and wild pig are common, and the lynx, hyæna, and sloth-bear are also found. Wild elephants occur in the Siwāliks. Deer of various sorts, the *sāmbhar* or *jarau*, *chital* or spotted deer, *kākar* or barking deer, and *pārha* or hog deer are also found, while the four-horned antelope and Himalayan chamois haunt the Siwāliks. The *karait* and cobra are the commonest poisonous snakes, while the Siwālik python grows to an immense size. The mahseer affords good sport in the Ganges, Jumna, and in the canals, and other kinds of fish are common.

The climate is the same as that of the United Provinces generally, modified by the northern position of the District and the cool breezes from the neighbouring country. The cold weather arrives earlier, and lasts longer than in the lower Districts; but the summer months are tropical in their extreme heat. The tract at the foot of the hills was very unhealthy before the jungle was cleared, but the climate is now comparatively good, except in the actual forest, which is still feverish during and immediately after the rains. Malarial fever is common throughout the District.

The rainfall varies in different parts of the District and is heaviest near the hills, where no recording station exists. The average fall for the whole District is about 37 inches; but it ranges from 33 inches at Nakūr in the south-west to 43 at Roorkee in the north-east.

The portion of the Doāb in which Sahāranpur is situated was probably one of the first regions of upper India occupied by the Aryan colonists, as they spread eastward from their original

* Falconer and Cantley, *Fauna antiqua siccaensis*. Lydekker and Foote, *Palæontologia Indica*, series X.

settlement in the Punjab. But the legends of the Mahābhārata centre around the city of Hastināpur, in the neighbouring District of Meerut; and it is not till the 14th century of our era that we learn any historical details with regard to Sahāranpur itself. The town was founded in the reign of Muhammad Tughlak, about the year 1340, and derived its name from a Musalmān saint, Shāh Haran Chishti, whose shrine is still an object of attraction to Muhammadan devotees.

At the close of the century the surrounding country was exposed to the ravages of Timūr, who passed through Sahāranpur on his return from the sack of Delhi, and subjected the Hindus inhabitants to all the usual horrors of a Mughal invasion. In the year 1414 the tract was conferred by Sultān Saiyid Khizr Khān on Saiyid Salīm; and in 1526, Bābar marched across it on his way to Pānīpat. A few Mughal colonies still trace their origin to his followers. A year later the town of Gangoh was founded by the zealous missionary, Abdul Kuddūs, whose efforts were the means of converting to the faith of Islām many of his Rājput and Gūjar neighbours. His descendants ruled the District until the reign of Akbar, and were very influential in strengthening the Musalmān element by their constant zeal in proselytizing. During the Augustan age of the Mughal empire Sahāranpur was a favourite summer resort of the court and the nobles, who were attracted alike by the coolness of its climate and the facilities which it offered for sport. The famous empress, Nūr Mahal, the consort of Jahāngir, had a palace in the village, which still perpetuates her memory by its name of Nūrnagar; and under Shāh Jahān, the royal hunting seat of Bādshāh Mahal was erected by Alī Mardān Khān, the projector of the Eastern Jumna Canal. The canal was permitted to fall into disuse during the long and disastrous decline of the Mughal power, and it was never of much practical utility until the establishment of British rule.

After the death of Aurangzeb, this region suffered, like the rest of upper India, from the constant inroads of warlike tribes and the domestic feuds of its own princes. The first incursion of the Sikhs took place in 1709, under the weakened hold of Bahādur Shāh; and for eight successive years their wild hordes kept pouring ceaselessly into the Doāb, repulsed time after time,

yet ever returning in greater numbers, to massacre the hated Muhammadans and turn their territory into a wilderness. The Sikhs did not even confine their barbarities to their Musalmān foes, but murdered and pillaged the Hindu community with equal violence. In 1716, however, the Mughal court mustered strength enough to repel the invaders for a time; and it was not until the utter decay of all authority that the Sikhs once more appeared upon the scene.

Meanwhile the upper Doāb passed into the hands of the Saiyid brothers of Bārha, whose rule was more intimately connected with the neighbouring District of MUZAFFARNAGAR. On their fall in 1721, their possessions were conferred upon various favourites in turn, until, in 1754, they were granted by Ahmad Shāh Durrāni to Najib Khān, a Rohilla leader, as a reward for his services at the battle of Kotila. This energetic ruler made the best of his advantages, and before his death (1770) had extended his dominions to the north of the Siwāliks on one side, and as far as Meerut to the other. But the end of his rule was disturbed by incursions of the two great aggressive races from opposite quarters, the Sikhs and the Marāthās. Najib Khān handed down his authority to his son, Zābita Khān, who at first revolted from the feeble court of Delhi; but on being conquered by Marāthā aid was glad to receive back his fief through the kind offices of his former enemies, then supreme in the councils of the empire. During the remainder of his life, Zābita Khān was continually engaged in repelling the attacks of the Sikhs, who could never forgive him for his reconciliation with the imperial party. Under his son, Ghulām Kādir (1785), the District enjoyed comparative tranquillity. The Sikhs were firmly held in check, and a strong government was established over the native chieftains.

But upon the death of its last Rohilla prince, who blinded the emperor Shāh Alam (II), and was mutilated and killed by Sindhia in 1788, the country fell into the hands of the Marāthās, and remained in their possession until the British conquest. Their rule was very precarious, owing to the perpetual raids made by the Sikhs; and they were at one time compelled to call in the aid of George Thomas, the daring military adventurer, who afterwards established an independent government in Hariāna. The

country remained practically in the hands of the Sikhs, who levied black-mail under the pretence of collecting revenue.

After the fall of ALIGARH and the capture of Delhi (1803), a British force was despatched to reduce Sahāranpur. Here, for a time, a double warfare was kept up against the Marāthās on one side and the Sikhs on the other. The latter were defeated in the indecisive battle of Charaon (24th November, 1804), but still continued their irregular raids for some years. Organization, however, was quietly pushed forward; and the District enjoyed a short season of comparative tranquillity, until the death of the largest landowner, Rām Dayāl Singh, in 1813. The resumption of his immense estates gave rise to a Gūjar revolt, which was put down before it had assumed very serious dimensions. A more dangerous disturbance took place in 1824; a confederacy on a large scale was planned among the native chiefs, and a rising of the whole Doāb might have occurred had not the premature eagerness of the rebels disclosed their designs. As it was, the revolt was only suppressed by a sanguinary battle, which ended in the total defeat of the insurgents and the fall of their ringleaders.

From that period till the Mutiny, no events of importance disturbed the quiet course of civil administration in Sahāranpur. News of the rising at MEERUT was received early in May, 1857, and the European women and children were immediately despatched to the hills. Measures were taken for the defence of the city, and a garrison of European civil servants established themselves in the Magistrate's house. The District soon broke out into irregular rebellion; but the turbulent spirit showed itself rather in the form of internecine quarrels among the native leaders than of any settled opposition to British Government. Old feuds sprang up anew; villages returned to their ancient enmities; bankers were robbed, and money-lenders pillaged; yet the local officers continued to exercise many of their functions, and to punish the chief offenders by ordinary legal process. On the 2nd of June a portion of the Native Infantry at Sahāranpur mutinied and fired upon their officers, but without effect. Shortly afterwards a small body of Gurkhas arrived, by whose assistance order was partially restored. As early as December, 1857, it was found practicable to proceed with the regular

assessment of the District, and the population appeared to be civil and respectful. In fact—thanks to the energy of its District officers—the Mutiny in Sahāranpur was merely an outbreak of the old predatory anarchy, which had not yet been extirpated by our industrial *régime*.

When the Eastern Jumna Canal was being excavated in 1834 the site of an old town was discovered, 17 feet below the surface, at Behat, 18 miles from Sahāranpur.* Coins and other remains proved its occupation in the Buddhist period. The three towns of Hardwār, Kankhal, and Māyāpura on the Ganges have been sacred places of the Hindus for countless years. Muhammadan rule is commemorated by tombs and mosques at several places, among which may be mentioned MANGLAUR, GANGOH, and Faizābād. SARSAWA is an ancient town, with a lofty mound, once a strong brick fort. The District contains two celebrated Muhammadan shrines; that of Pīrān Kaliār, a few miles from Roorkee, and the birth-place of Gūgā or Zāhir Pīr at Sarsāwā. Both are also revered by Hindus, and the cult of the latter is popular throughout northern India.

In 1901 there were 18 towns and 1,628 villages. The population at each census in the last 30 years has been: 1872, 884,017; 1881, 979,544; 1891, 1,001,280; 1901, 1,045,230. The District is divided into 4 *tahsils*, SAHARANPUR, DEOBAND, ROORKEE, and NAKUR, the headquarters town of each *tahsil* bearing the same name. The chief towns are the municipalities of SAHARANPUR, the headquarters of the District, HARDWAR, and DEOBAND. The following table shows the principal statistics of the District in 1901:—

Tahsil.	Area in square miles.	Number of—		Popula- tion.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Sahāranpur ...	619	1	497	334,681	541	+ 6.6	8,179
Deoband ...	385	3	311	220,152	572	+ 6.6	3,696
Roorkee ...	796	6	426	286,903	360	- 1.2	9,529
Nakūr ...	428	8	394	203,494	475	+ 5.3	4,385
District Total ...	2,228	18	1,628	1,045,230	469	+ 4.4	25,789

* Journal, Asiatic Society of Bengal, III, pp. 43 and 221.

Hindus number 65 per cent. of the total, and Muhammadans 34: the latter being a very high proportion, peculiar to the northern part of the plains. The District supports 469 persons to the square mile, and the density is thus slightly higher than the average of the Provinces (445). Between 1891 and 1901 the population increased by 4.4 per cent., the famine of 1896-97 having little effect. The principal language used is Western Hindī, which is spoken by more than 99 per cent.

Caste and
occupa-
tion.

The most numerous Hindu caste is that of the Chamārs (leather-workers and labourers; 204,000). Brāhmans number 43,000, Rājputs 46,000, and Baniās 28,000. Money-lenders have acquired a very large share in the District. The best cultivating castes are the Jāts (15,000), Mālīs (28,000), Sainīs (16,000), and Tagās (15,000); while the Gūjars, who are graziers as well as cultivators and landholders, number 51,000. Kahārs (41,000) are labourers, *pālki*-bearers, and fishermen. Among castes not found in all parts of the Provinces may be mentioned the Tagās, who claim to be Brāhmans, Sainīs, Gūjars, Jāts, and Kambohs (3,000), who only inhabit the western Districts, and the Banjārās (6,000) who chiefly belong to the submontane tract. The criminal tribes, Hābūrās (824) and Sānśiās (585), are comparatively numerous in this District. A very large proportion of the Muhammadan population consists of the descendants of converts from Hinduism. The three tribes of purest descent only number: Saiyids, 8,000; Mughals, 2,000; and Pathāns, 16,000. Shaikhs, who often include converts, number 28,000. On the other hand Muhammadan Rājputs have 23,000 members, Gūjars, 20,000; Telis (oil-pressers and labourers), 49,000; Julāhās (weavers), 45,000; and Gārās, 45,000; while the number of members of the lower artizan castes professing Islām is also considerable. The Gārās and Jhojhās (12,000) are peculiar to the west of the Provinces. The proportion of agriculturists (44 per cent.) is low, owing to the large number of landless labourers (14 per cent.) and artizans. Cotton weavers form 4 per cent. of the total population.

Christian
Missions.

Out of 1,617 native Christians in 1901, more than 1,100 were Methodists, 200 were Anglicans, 250 Presbyterians, and 53 Roman Catholics. The American Presbyterian Mission commenced work in 1835, and the Society for the Propagation of the

Gospel in 1855. The American Methodist Episcopal Mission in this District dates from 1874.

Excluding the jungle tracts immediately under the Siwāliks the District may be divided into two main tracts, the uplands in the centre, and the low-lying land or *khādar* on the banks of the great rivers. A feature of even greater importance is the possibility of canal irrigation, and generally speaking it may be said that cultivation is most careful where irrigation is available. It is inferior in the unprotected uplands, and worst in the *khādar* and submontane tracts. There are two harvests as usual, the autumn or *kharīf* and spring or *rabi*.

The main agricultural statistics according to the village papers are shown below for the year 1903-04, in square miles :—

<i>Tahsīl.</i>			Total.	Cultivated.	Irrigated.	Culturable waste.
Sahāranpur	...	...	619	370	51	30
Deoband	...	...	385	320	112	20
Roorkee	...	...	796	369	38	58
Nakūr	...	...	428	306	84	70
Total	...	...	2,228	1,365	285	178

The District presents no peculiarity of tenures. Out of 2,500 *mahāls* 900 are *bhaīyāchārā*, 900 are *pattidāri*, and 700 *zamīndāri*. The area in square miles under each of the principal food grains in 1903-04 was : wheat (553), rice (204), *gram* (203), maize (126), *bājra* (127), and barley (55). Other important crops are sugarcane (64) and cotton (26).

The great feature of the District is the enormous extension of rice cultivation, especially in the Nakūr, Deoband, and Roorkee *tahsīls*, and the increased area under the more valuable crops—wheat, barley, and sugarcane. The area under cotton fluctuates, but is not increasing. Very small amounts are ordinarily advanced under the Agriculturists' Loans Act. Between 1891 and 1903 the advances amounted to half a lakh, but Rs. 34,000 of this were lent in the famine years 1896-97. Advances under the Land Improvement Act are still smaller.

Much has been done in this District to improve the drainage, especially in the Jumna and Ganges *khādars*, by straightening and embanking streams. In 1880 a new branch of the Ganges Canal was opened, which serves the Deoband *tahsīl*.

Cattle and
ponies.

There is no local breed of cattle, and the animals used are either imported, or of the inferior type common in the Provinces. The breed of horses in the south of the District was formerly good, and in 1842 a stud farm was opened at Sahāranpur. For many years there was a considerable sale of horses at the Hardwār fair; but this has almost ceased, and the Sahāranpur farm is now a depôt for training imported remounts.

Government stallions are, however, maintained at several places in the District. Mule-breeding has been tried, and there are several donkey stallions; but the operations have not been very successful.

Irriga-
tion.

Of the total cultivated area in 1903-04, the area irrigated by canals was 201 square miles or 15 per cent. Wells supplied 75 square miles, and other sources 9. The canal irrigation is supplied by the EASTERN JUMNA and UPPER GANGES CANALS, both of which start in this District. The former irrigates about 130 square miles in the Nakūr, Deoband, and Sahāranpur *tahsīls*, and the latter about 75 square miles in Deoband, Sahāranpur, and Roorkee. Well irrigation is only important in Nakūr. Up to 1880 the area irrigated from the Ganges Canal in this District was small, but the construction of the Deoband branch between 1878 and 1880 has enabled a larger area to be watered. There is a striking difference in the methods of irrigation from wells. East of the Hindan water is raised in a leather bucket, as in most parts of the Provinces, while to the west the Persian wheel is used.

Forests.

The total area of the forests in this District is 295 square miles. Most of this area is situated on the slopes of the Sivāliks or in the tract along the foot of the hills; but there are also reserves on the islands in the Ganges below Hardwār, and in the centre of the Roorkee *tahsīl* south of Hardwār. The forests on the hills, with an area of nearly 200 square miles, are chiefly of value as grazing and fuel reserves and as a protection against erosion; but in the submontane tract *sāl* timber may in time become valuable. In 1903-04 the total revenue was

Rs. 45,000, of which only Rs. 11,000 were received for timber and bamboos, the other receipts being chiefly for firewood, charcoal, grazing, and minor products.

The mineral products are insignificant. In the middle and southern portions, *kankar* or nodular limestone is found a few feet below the surface, and block *kankar* is occasionally found. To the north the sub-stratum consists of shingle and boulders, gradually giving place to sandstone, which appears at the surface in the Mohan Pass. Stone hard enough for building purposes is scarce, and Sir Proby Cautley was obliged to use brick largely in the magnificent works on the upper course of the Ganges Canal. The houses at Hardwār and Kankhal are often constructed of pieces of stone carefully selected; but the quantity obtained is not large enough to defray the expense of carriage to a long distance; and building stone is generally obtained from Agra. Minerals.

The most important indigenous industry is that of cotton weaving, which supports 46,000 persons or 4 per cent. of the population. Next to this comes wood-carving, which is very flourishing, though the increased demand has led to a deterioration in style and finish. Less important industries are cloth dyeing and printing, cane and woodwork, and glass-blowing in country glass. In 1903 there were two cotton ginning and pressing mills, one rice mill, and an indigo factory. There are also five Government factories of some importance, *viz.* the North-Western Railway workshops at Sahāranpur, the Canal foundry, the Sappers and Miners workshops, and the Thomason College Press and workshops, the last four being all at Roorkee. Arts and Manufactures.

The opening of new railways has greatly developed trade, and the District has a large export business with the Punjab and Karāchi, by the North-Western Railway, with Bombay *via* Ghāziābād, and with Calcutta by the Oudh and Rohilkhand Railway. Wheat and oilseeds are the articles most largely exported, and salt, metals, and piece-goods the chief imports. Commerce.

The first railway opened was the North-Western Railway in 1869, which enters the District in the middle of the southern boundary and passes north-west through Sahāranpur. In 1886 the Oudh and Rohilkhand Railway main line was extended Railways and Roads.

through Roorkee to Sahāranpur, its terminus, and a branch line was opened from Laksar to Hardwār, the great pilgrim centre. The latter was extended by the Hardwār-Dehra (Company) line in 1900, and now conveys the whole of the passenger and most of the goods traffic to the hill station of Mussoorie. A light railway has been sanctioned from Shāhdara, in the Meerut District, to Sahāranpur.

The total length of metalled roads is 111 miles, and of unmetalled roads 415 miles. Except 98 miles of metalled roads the whole of these are maintained from local funds. There are 176 miles of avenues. From Sahāranpur two roads lead north across the Siwālīks and the valley of the Dūn. The road to CHAKRATA is still a military route, though maintained by the civil authorities, but that to Dehra has lost its importance. The old road from the Doāb to the Punjab lies along the North-Western Railway, which has largely superseded it. The Jumna and Ganges *khādar* are not well supplied with roads, but the latter is generally accessible from the Oudh and Rohilkhand Railway. The Forest department maintains a road along the foot of the Siwālīks, and there are good roads along the canal banks. The Ganges Canal is navigable, and carries timber and bamboos to Meerut, but the Jumna Canal has no navigable channels.

Famine.

The District has suffered from famine, but not so severely as the Districts south of it. Remissions of revenue were made in 1837-38. In 1860-61 work was provided on a road from Roorkee to Dehra, at a cost of 2½ lakhs, besides an expenditure of Rs. 59,000 on other relief. It was noted, however, that the great canals had mitigated the scarcity, and there was an average spring crop in two-fifths of the District. In 1868 and 1877 the failure of the rains caused distress; but it was not so marked as in other Districts. During 1896-97, when famine raged elsewhere, the high prices of grain caused exceptional prosperity to agriculturists in the tracts protected by canals and wells; and though test works were opened, no workers came to them.

District sub- divisions and staff.

The District is divided into 4 *tahsīls* and 15 *parganas*. The Roorkee *tahsīl* forms a sub-division usually in charge of a Joint Magistrate residing at Roorkee, assisted by a Deputy Collector. A *tahsildār* is stationed at the headquarters of each

tahsīl. The remaining members of the District staff, *viz.* the Collector, 3 full-powered assistants, and one assistant with less than full powers, reside at Sahāranpur. There are also officers of the Canal department.

The *tahsīls* of Sahāranpur and Nakūr are in the jurisdiction of the Munsiff of Sahāranpur and the rest of the District under the Munsiff of Deoband. There are also a Subordinate Judge and (1904) one Assistant Judge. Civil appeals from the Dehra Dūn District (except Chakrātā *tahsīl*) lie to the District Judge of Sahāranpur, who also sits as Sessions Judge for both Districts. Crime is of the ordinary nature; cattle-theft is more than usually common, owing to the number of Gūjars, who are notorious cattle-lifters. Infanticide was formerly very prevalent; but the number of families proclaimed has fallen considerably, and the cost of special police is only Rs. 600 annually as compared with Rs. 4,000 in 1874.

The District was acquired in 1803 and at first formed part of a large area called Sahāranpur, which also included the Muzaffarnagar and part of the Meerut Districts. This was divided into a northern and southern part. The District as it exists at present was formed in 1826. At annexation a large portion of it was held at a fixed revenue by a few powerful chiefs, whose occupation dated from the troubled times of Rohilla and Marāthā government, and these tenures were not interfered with till the death of the grantees, between 1812 and 1815. Elsewhere the usual system of short settlements based on estimates of the value of crops was in force, and engagements for the payment of revenue were taken from the actual occupiers of the soil. A quinquennial settlement made on the same principles in 1815-16 was extended by two further terms of 5 years each. The next settlement was based on a chain survey, and on more accurate calculations of outturn from which fair rents were estimated, or on the value of the share of produce actually taken by the landlords. Produce rents were the rule and soil rents were unknown. In 1859 a new assessment was commenced. This was based on a plane table survey; but the proposals were not accepted, and the assessment was revised between 1864 and 1867. Standard rent-rates were obtained by classifying villages according to their agricultural condition, and ascertaining the

average of the cash rents, or by calculating soil rates. The latest revision was commenced in 1887, and was largely made on rent-rolls corrected in the usual way. Cash rents only existed in 43 per cent. of the total area, and the valuation of the grain-rented area was difficult. The revenue fixed was 14·3 lakhs or 47 per cent. of the corrected rental. It fell at R. 1-14-0 per cultivated acre and R. 1-9-0 per assessable acre, the rates varying in different *parganas* from R. 1 to Rs. 2-2-0.

The total receipts from land revenue and all sources have been, in thousands of rupees:—

			1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	...	12,07,	13,05,	15,33,	15,25,
Total revenue	...	...	15,22,	20,31,	25,03,	25,34,

Local
self-gov-
ernment.

There are four municipalities, SAHARANPUR, HARDWAR UNION, DEOBAND, and ROORKEE, and 14 towns administered under Act XX of 1856; the population of 5 of the latter, *viz.* GANGOH, MANGLAUR, RAMPUR, AMBAHTA, and NAKUR, exceeds 5,000. Outside these places local affairs are administered by the District board. In 1903-04 the income and expenditure of the latter were 1·2 lakhs, the expenditure on roads and buildings being Rs. 40,000.

Police and
Jails.

The police of the District are supervised by a Superintendent and 2 assistants, and 5 inspectors. There are 22 police-stations and the total force includes 97 sub-inspectors and head constables and 446 men, besides 373 municipal and town police, 2,035 rural and road police. The District jail is in charge of the Civil Surgeon, and had an average of 306 inmates in 1903.

Educa-
tion.

Only 2·5 per cent. of the population (4·5 per cent. males, ·2 per cent. females) can read and write against a Provincial average of 3·1 per cent. The proportion is distinctly higher in the case of Hindus than of Musalmāns, and the Sahāranpur and Roorkee *tahsils* are better than the other two. In 1880-81 there were 157 schools with 5,000 pupils exclusive of private and un-inspected schools. In 1903-04, 198 public institutions contained 8,158 pupils, of whom 581 were girls, besides 429 private

schools with 6,198. Out of 212 schools classed as public, 4 were managed by Government, and 117 by the District and municipal boards. Of the total number of scholars 12,000 were in primary classes. The total expenditure on education was 2·6 lakhs, of which 1·9 lakhs were met from Government funds, Rs. 39,000 from local funds, and Rs. 9,000 from fees. The bulk of the Government expenditure is on the Roorkee College. There is a famous school of Arabic learning at Deoband.

There are 15 hospitals and dispensaries with accommodation for 80 in-door patients. In 1903 the number of cases treated was 107,000, of which 2,500 were those of in-patients, and 8,000 operations were performed. The total income was Rs. 21,000, chiefly from the District board.

The number of persons vaccinated in 1903-04 was 37,000 or 36 per thousand of population. Vaccination is only compulsory in the municipalities and in the cantonment of Roorkee.

[*District Gazetteer*, 1875 (under revision); L. A. S. Porter, *Settlement Report*, 1891.]

Sahāranpur Tahsīl.—The northernmost *tahsīl* of the Sahāranpur District, United Provinces, lying between 29° 52' and 30° 24' N. and 77° 26' and 77° 53' E. It includes an area of 619 square miles, and is divided into four *parganas*, viz. Faizābād, Muzaffarābād, Sahāranpur, and Haraura. The boundaries are artificial on the south and east, while the Jumna flows on the west, and the Siwāliks form the northern boundary. The population rose from 312,498 in 1891 to 334,681 in 1901. There are 497 villages and one town, SAHARANPUR, population 66,254, the headquarters of the District and *tahsīl*. In 1903-04 the demand for land revenue was Rs. 4,26,000 and for cesses Rs. 69,000. The rainfall is 38 inches or slightly above the District average. In the north of the *tahsīl* is a strip of forest land. Of 370 square miles cultivated in 1903-04, 51 were irrigated. Irrigation is chiefly supplied by the Eastern Jumna Canal, which runs through the western portion. Much has been done to improve the drainage of the north-western portion of the *tahsīl*, which is intersected by a network of small streams.

Deoband Tahsīl.—A *tahsīl* in the south of the Sahāranpur District, United Provinces, lying between 29° 34' and 29° 53' N. and 77° 21' and 77° 49' E. On the south it marches with the

Muzaffarnagar District; but the boundaries are artificial. The *tahsīl* includes three *parganas*: Rāmpur, Nāgal, and Deoband, and has an area of 385 square miles, of which 320 were cultivated in 1903-04. The population rose from 205,627 in 1891 to 220,152 in 1901. The *tahsīl* contains three towns, DEOBAND, the *tahsīl* headquarters, population 20,167, and RAMPUR (7,945), being the largest, and 311 villages. The demand in 1903-04 for land revenue was Rs. 3,85,000 and for cesses Rs. 64,000. The west of the *tahsīl* is irrigated by the Eastern Jumna Canal, and the east by the Deoband branch of the Upper Ganges Canal. The latter work, opened in 1880, has been of great value. 112 square miles were irrigated in 1903-04.

Roorkee Tahsīl.—The eastern *tahsīl* of the Sahāranpur District, United Provinces, lying between $29^{\circ} 38'$ and $30^{\circ} 8' N.$ and $77^{\circ} 43'$ and $78^{\circ} 12' E.$, with an area of 796 square miles. The *tahsīl* is bounded on the north by the Siwāliks, on the east by the Ganges, and on the south by the Muzaffarnagar District, and includes the *parganas* of Roorkee, Jwālāpur, Manglaur, and Bhagwānpur. The population fell from 290,498 in 1891 to 286,903 in 1901. There are 426 villages and 6 towns, HARDWAR-UNION, population 25,597, ROORKEE, the *tahsīl* headquarters, (14,197), and MANGLAUR (10,763), being the largest. In 1903-04 the land revenue amounted to Rs. 3,86,000 and cesses to Rs. 62,000. In the same year 369 square miles were cultivated and 38 irrigated. Besides the forests on the slopes and at the foot of the Siwāliks the *tahsīl* contains an area of 20 square miles of grazing reserve south of Roorkee, known as the Pathrī forest, and a large area of lowlying land in the Ganges *khādar*. The headworks of the UPPER GANGES CANAL are near Hardwār; but the area irrigated in this *tahsīl* is small. The average rainfall is about 43 inches, which is the largest in the District. Some successful drainage operations have been carried out near Pathrī. The *tahsīl* forms a regular sub-division of the District, with a Civilian Joint Magistrate and a Deputy Magistrate recruited in India, residing at Roorkee, the headquarters town.

Nakūr Tahsīl.—South-western *tahsīl* of the Sahāranpur District, United Provinces, lying between $29^{\circ} 39'$ and $30^{\circ} 10' N.$ and $77^{\circ} 7'$ and $77^{\circ} 34' E.$ It includes four *parganas*, Sultānpur, Sarsāwā, Nakūr, and Gangoh, which all lie on the

east bank of the Jumna. The total area is 428 square miles, of which 306 were cultivated in 1903-04. There are 394 villages and 8 towns, including GANGOH, population 12,971, AMBAHTA (5,751), and NAKŪR, the headquarters (5,030). The population rose from 192,657 in 1891 to 203,494 in 1901. The demand on account of land revenue was Rs. 3,29,000 in 1903-04, and for cesses Rs. 55,000. About one-third of the *tahsīl* lies in the Jumna *khādar*. The eastern portion is irrigated by the Eastern Jumna Canal, which supplied 24 square miles in 1903-04, while 60 square miles were irrigated from wells.

Ambahtā.—A town in Nakūr *tahsīl*, Sahāranpur District, United Provinces, situated in 29° 52' N. and 77° 20' E. Population (1901) 5,751, Muhammadans being nearly twice as numerous as Hindus. The place was originally a cantonment for Mughal troops, established by Fīroz Shāh Tughlak, and was known as Fīrozābād. The present town is modern, but contains two mosques, one built about 1516 and one later, in Humāyūn's reign. The tomb of Shāh Abul Maālī, who died in the 17th century, is a fine domed building with minarets, still in good repair. The town is administered under Act XX of 1856, the annual income being about Rs. 1,600. Ambahtā carved doors have a well-deserved reputation.

Deoband Town.—A municipality in the Sahāranpur District, United Provinces, and headquarters of the Deoband *tahsīl*, situated in 29° 42' N. and 77° 41' E. It lies on the old road from the Doāb to the Punjab and is close to the main line of the Oudh and Rohilkhand Railway. Population (1901) 20,167, of whom more than half (11,825) were Musalmāns.

According to legend the town owes its name to the presence of a sacred grove (*Devī ban*), and an annual religious assembly still takes place in a neighbouring wood, where there is a temple of Devī. Local tradition relates that the Pāndavas spent their first exile here, and the fort is said to have been one of the earliest to fall in the raid of Sālār Masūd Ghāzī. During the Mutiny several disturbances occurred, which were repressed without much difficulty.

The town is situated 2½ miles west of the East Kālī Nadi, and the natural drainage of the country has been altered by the construction of the canals and railway. The drainage

question is therefore of considerable difficulty. The outskirts have been fairly well drained, but the town itself presents a great problem. A scheme to cost Rs. 4,000 has been prepared, and is now (1904) awaiting final sanction. The Arabic College here is one of the most important of its kind in upper India. It was founded about 1876 and was an offshoot of the Ajmere Gate College at Delhi, now defunct. There are pupils from Afghānistān, Bokhāra, and Samarkand in one direction, and from Madras and Bengal in the other. The teaching is entirely devoted to eastern learning, especially Muhammadan theology, and the institution has no connection with Government. There are also an English and an anglo-vernacular school, and a dispensary, besides the *munsiffi* and *tahsili* offices.

The municipality was constituted in 1868. The average income and expenditure from 1892 to 1901 have been Rs. 13,000. In 1903-04 the income was Rs. 37,000, chiefly from a grant of Rs. 20,000 and from octroi (Rs. 15,000), and the expenditure Rs. 18,000. Deoband is a large grain-exporting centre, and in the busy season several Calcutta firms have agents here buying wheat. Refined sugar and oilseeds are also exported, and the town is noted for the manufacture of cloth and country blankets.

Gangoh.—Town in *tahsīl* Nakūr, District Sahāranpur, United Provinces, situated in 29° 47' N. and 77° 17' E. It is the chief town in the *pargana* of the same name. Population (1901) 12,971. Hindus numbered 5,741 and Musalmāns 7,172.

The town consists of an old and new quarter, the former founded by a legendary hero, Rājā Gang, from whom its name is derived, and the latter by the famous saint, Shaikh Abdul Kuddūs, who gives his title to the western suburb, where his mausoleum stands, built by Humāyūn in 1537. During the Mutiny Gangoh was frequently threatened by the rebel Gūjars under the self-styled Rājā Fathūā; but Mr. H. D. Robertson and Lieutenant Boisragon attacked and utterly defeated them towards the end of June, 1857. There are 3 old mosques, 2 of which were built by Akbar and Jahāngīr, besides a school and dispensary. The town is liable to be flooded from a large swamp south of the site, but a scheme has been prepared to drain this. The streets are paved and most of them have brickwork drains.

Gangoh is administered under Act XX of 1856, the income raised being about Rs. 3,000 a year. It is the cleanest and best kept of all the Act XX towns in the District.

Hardwār.—An ancient town and place of pilgrimage in the Sahāranpur District, United Provinces, situated in 29° 58' N. and 78° 10' E. Till 1900 it was the terminus of a branch of the Oudh and Rohilkhand Railway opened in 1886, but it is now also connected by rail with DEHRA. The pilgrim route to the shrines of Kumaun passes through it. The population fluctuates considerably according to the number of pilgrims visiting it, and has been: 1872, 21,555; 1881, 28,106; 1891, 29,125; and 1901, 25,597. Of the total population in 1901 Hindus numbered 18,209 and Musalmāns 7,119.

The place has borne several names. According to tradition it was named Kāpilā after the sage of that name, who is said to have lived here. In the 7th century Hiuen Tsiang described a town named Mo-yu-lo, which was probably Mayūra or Māyāpur, a suburb south of Hardwār. The Chinese pilgrim also mentions that there was a Brahmanical temple north of Mo-yu-lo which the Hindus called "the gate of the Ganges," and this name *Gangādwāra* is regularly used by the Muhammadan historians for Hardwār. The meaning of the present name is disputed. Worshippers of Siva derive it from Hara, a name of Siva, while the Vaishnavas claim that the correct origin is from Harī, a synonym of Vishnu. Abul Fazl, in the reign of Akbar, refers to Māyā, known as Harīdwāra, and Tom Coryat, who visited the place in Jahāngīr's reign, called it 'Harī-dwāra, the capital of Siva.' The town is beautifully situated on the right bank of the Ganges, at the foot of the Siwāliks close by the gorge through which the river debouches on the plains. On the opposite shore rises the hill of Chandī Pahār, whose summit is crowned by a temple. The Ganges here divides into many shallow channels, intercepted by wooded islands. One channel commences about 2 miles above Hardwār, and flows past the main town and its suburbs, Māyāpur and Kankhal, rejoining the parent river a little below the last-mentioned place. The head works of the UPPER GANGES CANAL are situated on this branch between Māyāpur and Kankhal. The town has grown considerably since the early part of the 19th century.

At the present day the great object of attraction is the bathing *ghāt* called *Harī-kā-charan* or *Harī-kī-pairī* (Vishnu's foot-print), with the adjoining temple of *Gangā-dwāra*. A stone on the wall of the *ghāt* bears the foot mark, which is an object of special reverence. Pilgrims struggle to be the first to plunge into the pool on great occasions, and stringent police regulations are required to prevent the crowd from trampling one another to death. In 1819, 430 persons, including some sepoys on guard, lost their lives in this manner, and the *ghāt* was enlarged. The great assemblage of pilgrims is held annually on the first day of the month of *Baisākh*, the commencement of the Hindu solar year, when the sun enters Aries. Every twelfth year the planet Jupiter is in the sign *Aquarius* (*Kumbh*) at this time, and the occasion is considered one of special sanctity, the fair being called the *Kumbh mela*. In 1796 the attendance was estimated at $2\frac{1}{2}$ million, and in 1808 at 2 million. These were probably exaggerations, as the number at ordinary fairs was later found to be only about 100,000 and at the *Kumbh mela* about 300,000. In 1892 the fair was broken up on account of an outbreak of cholera, and the vast concourse of people sent off by rail before the great bathing day. The result of this action was the formation of the *Hardwār Improvement Society*, supported by contributions from Hindus all over India, which has introduced various useful sanitary reforms. The bottom of the pool has been paved, and the current of the *Ganges* directed so as to secure a constant strong flow of water, while an iron railing has been erected to prevent bathers from being carried away. Another sacred pool, called *Bhīmgoda*, has been enlarged and paved, and water is now supplied from the *Ganges*. The society also furnished part of the funds required to bridge a torrent bed-lying between the station and the town. Plague broke out in 1897, but was quickly suppressed. A few more cases took place in 1898 and the measures adopted to prevent the spread led to a riot. The numbers at the fair have decreased considerably since plague appeared. The numbers at one time are also affected by the fact that pilgrims now visit *Hardwār* throughout the year, instead of only on the fixed days. On the great bathing day at the *Kumbh* fair of 1903 about 400,000 persons were present. Cholera,

however, broke out; and although the cases at Hardwār were few, the disease was carried by the pilgrims into the hill tracts leading to the Himālayan shrines. In early days riots and bloody fights were of common occurrence amid the excited throng. In 1760, on the great bathing day, the rival mobs of *gosains* and *bairāgis* had a long battle, in which 1,800 are said to have perished. In 1795 the Sikh pilgrims slew 500 of the *gosains*. Timūr plundered and massacred a great concourse of pilgrims here shortly after seizing Delhi in 1398. In 1894 it was anticipated that the flood caused by the GOHNA LAKE would damage the town and headworks of the canal; but the river only rose 12 feet, and the damage was not excessive. The trade of the town is confined to supplying the wants of the pilgrims and to the through traffic with Dehra. Branches of the American Methodist Mission are maintained at Jwālāpur and Kankhal. The Hardwār Union Municipality was constituted in 1868, and includes the two villages of Māyāpur and Kankhal. The average income and expenditure from 1892 to 1901 were about Rs. 43,000. In 1903-04 the income was Rs. 91,000, of which Rs. 31,000 were derived from octroi, Rs. 20,000 from an advance, and Rs. 33,000 from a pilgrim tax. The expenditure was 1·2 lakhs: chiefly on the fair, Rs. 84,000.

Manglaur.—Town in Roorkee *tahsil*, Sahāranpur District, United Provinces, situated in 29° 48' N. and 77° 53' E. It is six miles south of ROORKEE and close to the Upper Ganges Canal. Population (1901) 10,763. According to tradition the town was founded by Rājā Mangal Sen, a Rājput feudatory of Vikramāditya, and the remains of a fortress attributed to him can still be traced. A mosque in the town was built by Balban in 1285. There is little trade, but the crops grown in the neighbourhood are irrigated from the canal and are exceptionally fine, and there is a great demand for manure. The place was formerly noted for carpentry. This industry which had begun to decline has now revived; and very good chairs and other articles are made. The Muhammadan weavers are much impoverished. Manglaur is administered under Act XX of 1856, with an annual income from taxation of about Rs. 3,500. Much has been done to improve its sanitary condition.

Nakūr Town.—Headquarters of the *tahsīl* of the same name in the Sahāranpur District, United Provinces, situated in 29° 56' N. and 77° 18' E. Population (1901), 5,030, Hindus and Musalmāns being equally divided. Nakūr is said to have been founded by Nakula, one of the Pāndavas from whom its name is derived. The town suffered much in the Mutiny and was burnt by a party of Gūjars; but a relieving force recovered part of the plunder. There is a fine Jain temple and also a *tahsīlī* school, dispensary, and *sarai*, all well built. Act XX of 1856 is in force, and taxation yields about Rs. 1,100 a year. The site is raised and well drained. There is very little trade.

Rāmpur.—Town in Deoband *tahsīl*, Sahāranpur District, United Provinces, situated in 29° 48' N. and 77° 28' E., on the old road from Sahāranpur to Delhi. Population (1901), 7,945, the number of Hindus and Musalmāns being about equal. The town is said to have been founded by one Rājā Rām, and according to tradition it was captured by Sālār Masūd. There are a fine modern Jain temple and a tomb of a Muhammadan saint, Shaikh Ibrāhīm, near which a religious fair is held in June. The town is administered under Act XX of 1856 and the annual income is about Rs. 2,000. There is some trade in grain, and the town is noted for the manufacture of glass bangles.

Roorkee Town (*Rūrki*).—An important town, municipality, and cantonment in the Sahāranpur District, United Provinces, and headquarters of the Roorkee *tahsīl*, situated in 29° 51' N. and 77° 53' E. It lies on the main line of the Oudh and Rohilkhand Railway and is connected by road with Sahāranpur and Hardwār. The Upper Ganges Canal passes between the native town and the cantonments. Population (1901) 17,197. Hindus numbered 9,256 and Muhammadans 6,197.

Roorkee was the headquarters of a *mahāl* or *pargana* mentioned in the Ain-i-Akbarī; but about 1840, when the Ganges Canal works commenced, it was a mere mud-built village on the banks of the SOLANĪ. It is now a fair-sized town with fine broad metalled roadways, meeting at right angles and lined with excellent shops. The town is provided with good saucer drains flushed with water pumped from the canal. A short distance above the town the Ganges Canal is carried over the wide bed of the Solānī by a magnificent brick

aqueduct. Roorkee first became important as the headquarters of the canal workshops and iron foundry which were established in 1845-46, and extended and improved in 1850. For 30 years the workshops were conducted rather on the footing of a private business than as a Government concern. In 1886 they were brought under the ordinary rules for Government manufacturing departments. The annual outturn is now valued at about 2 to 3 lakhs, and 80 workmen were employed in 1903. Roorkee is the headquarters of the Bengal Sappers and Miners, who have large workshops employing 135 men in 1903. The most important institution is, however, the Thomason Engineering College, called after its founder, who was Lieutenant-Governor from 1843 to 1853. This institution had its origin in a class started in 1845 to train native youths in engineering, to assist in the important public works then beginning. The decision arrived at in 1847 to carry out the Ganges Canal project increased the necessity for a well-trained staff of engineers, and the college was opened in 1848. In 1851 there were 50 students and 42 had entered the service. Up to 1875 each student received a stipend, but from that year the number of scholarships and the number of guaranteed appointments were limited, though education remained practically free. Since 1896 all students except soldiers and industrial apprentices have paid fees; but the applications for admission far exceed the accommodation. In the same year the methods of instruction were greatly developed, and the college was practically rebuilt. There are now chemical, physical, electrical, and mechanical laboratories, and technical workshops fitted with the latest tools and machinery. The press is supplied with power machines, and turns out all varieties of work besides ordinary printing. There are also mechanical and industrial classes. The total number of students in 1903-04 was 369, and in 1903 the press employed 125 workmen and the workshops 52 besides 77 students. Roorkee is also the headquarters of the Society for the Propagation of the Gospel and American Methodist Missions in this District. The Joint Magistrate and the Deputy Collector posted to the sub-division and an Executive Engineer of the Upper Ganges Canal reside here.

The municipality was created in 1868, and the average annual income and expenditure from 1892 to 1901 have been

Rs. 17,000 and Rs. 16,000. In 1903-04 the income was Rs. 27,000, chiefly from octroi (Rs. 16,000), and the expenditure was Rs. 28,000.

Besides the Bengal Sappers and Miners, two heavy batteries of artillery are ordinarily stationed here. The cantonment income and expenditure is about Rs. 6,000 annually, and the population in 1901 was 2,951.

Sahāranpur City.—A municipality and the headquarters of the District and *tahsīl* of the same name, United Provinces, situated in 29° 57' N. and 77° 33' E., 988 miles by rail from Howrah and 1,069 from Bombay. The town lies on the old road from the Doāb to the Punjab, and is the junction of the Oudh and Rohilkhand Railway main line, which ends here, with the North-Western Railway. The population has risen in the last 30 years: 1872, 43,844; 1881, 59,194; 1891, 63,194; and 1901, 66,254. More than half the total population (37,614) are Musalmāns. The history of the town has been given in that of the District. It was founded about 1,340, and derives its name from a Musalmān saint, Shāh Haran Chishtī. In Akbar's time it was the headquarters of a *sarkār*, and was sufficiently important to be constituted a mint town.

The town lies in a low, moist situation on both sides of the Dhamaula Nadi, and is also traversed by the Pandhoi Nadi. In 1870 both of these streams were improved and deepened, with marked effects on the health of the city. In 1900 the main city drain was paved and cunetted, and a scheme for flushing all drains is under consideration. About three-quarters of the houses are built of brick, and trade is increasing. The opening of the North-Western Railway in 1869 gave the first impetus, and the opening of the Oudh and Rohilkhand line in 1886 has still further increased the importance of Sahāranpur. The place has, however, lost the traffic to the hill station of MUSSOORIE, which now passes by the Hardwār-Dehra Railway opened in 1900. Besides the headquarters of the ordinary District staff, the officer in charge of the Botanical Survey of upper India and the Executive Engineer, upper division, Eastern Jumna Canal, reside here. Sahāranpur also has large railway workshops, which employed 241 hands in 1903, and in the same year two cotton gins employed 158 and a rice-mill

92 hands. Wood-carving is an important hand industry and good really work can be obtained. The Government Botanical gardens, founded in 1817 on the site of an old garden of the Rohillas cover an area of 156 acres and sell large quantities of fruit trees, strawberry plants, timber and ornamental trees and shrubs, and flower and vegetable seeds, besides supplying drugs to Government. The former stud farm, with an area of 2,413 acres, is now a reserve remount depôt, at which imported horses are trained and acclimatized for the army. The American Methodist and Presbyterian Churches have missions here, and there is a fine Muhammadan mosque built on the model of the Delhi Jāma Masjid.

Sahāranpur was constituted a municipality in 1867. The average income and expenditure in the ten years ending 1901 were Rs. 62,000 and 59,000. In 1903-04 the income was Rs. 93,000, chiefly derived from octroi (Rs. 65,000), and the expenditure was Rs. 77,000.

Sarsāwā.—An ancient town in *tahsīl* Nakūr, District Sahāranpur, United Provinces, situated in 30° 1' N. and 77° 25' E. It stands near a station of the same name on the North-Western Railway, and is on the old road from Sahāranpur to the Punjab. The population fell from 3,827 in 1891 to 3,439 in 1901. The town takes its name from Siras Pāl, who was attacked and defeated by Nāsir-ud-dīn of Ghazni, and is also said to have been plundered by Mahmūd of Ghazni. In Bābar's time the mound was still a strong brick fort, and the town and fort are mentioned as important places in the *Ain-i-Akbarī*. According to one version Sarsāwā was the birthplace of the celebrated saint Gūgā or Zāhir, who is revered by both Hindus and Muhammadans all over northern India.*

Muzaffarnagar District.—A District in the Meerut Division, United Provinces, with an area of 1,666 square miles, lying between 29° 10' and 29° 45' N. and 77° 2' and 78° 6' E. On the north it is bounded by the Sahāranpur District and on the south by Meerut, while the Ganges separates it on the east from Bijnor, and the Jumna on the west from the Punjab District of Karnāl. The District consists of a central elevated tract flanked on either side by the low-lying land or *khādar*

Boundaries, configuration, and river system.

* Crooke, *Popular Religion of Northern India*, p. 133.

of the Ganges and Jumna. The Ganges *khādar* is a precarious tract of moist land with scanty cultivation, but generally covered with coarse grass and occasional patches of tamarisk. The northern portion, included in the Gordhanpur *pargana*, is especially liable to flooding from the SOLANI river, which is increased by percolation from the Upper Ganges Canal. Drains and dams have been constructed but with little success, and the *khādar* is chiefly valuable as a grazing-ground. The Jumna *khādar* is less swampy, but is equally poor, and much of it is covered with *dhāk* (*Butea frondosa*) jungle. The uplands are divided into four tracts by four rivers flowing from north to south. On the east is the large tract lying between the old high bank of the Ganges and the KALI NADI WEST, which is watered by the Upper Ganges Canal. This tract is generally fertile, but is crossed by a sandy ridge, and suffers from excessive moisture near the Kālī Nadi. Between this river and the HINDAN lies another fertile tract, which was immensely improved by the opening of the Deoband branch of the Ganges Canal in 1880, as the spring level is very low. This area is less sandy than the first, but is crossed by one well-defined belt of sand. West of the Hindan sand is comparatively rare, and the tract between this river and the Karsunī or Krishnī is uniformly good in the centre, though less fertile in the north and south. Between the Karsunī and Kathā, which marks the beginning of the Jumna tract, lies an area which is flourishing in the south, but inferior in the north, where population is scarce. This tract is watered by the Eastern Jumna Canal.

Botany.

The botany of the District presents no peculiarities. In the north-west corner *dhāk* jungle is abundant. About 16 square miles of the District are under groves, the mango, pomegranate, and guava being the favourite trees. *Shīsham*, *jāmun*, and *siras* are the most common species in avenues. Thatching-grass is abundant, but its use is giving way to that of tiles.

Geology.

The District consists entirely of the Gangetic alluvium, which varies from fine sand to stiff clay.

Fauna.

Wolves are fairly common and wild pig swarm in the *khādar* and near the canals. Hog-deer are also found near

swampy land, and leopards are occasionally seen. Tigers, which were formerly common, are now very rare.

The climate is comparatively cool, owing to the proximity of the hills, and the mean temperature is about 76°. There can be no reasonable doubt that the wide extension of irrigation has had a prejudicial effect on the climate, and its stoppage near towns has occasionally been necessary in the interest of the public health. Fever is consequently the most fatal form of disease.

Climate
and emp-
erature.

The average rainfall over a long series of years has been 33 inches, but the amount received increases gradually from 30 inches in the west to about 37 inches in the east. Large variations from the normal are not very common.

Rainfall.

Tradition represents Muzaffarnagar as having formed a portion of the Pāndava kingdom which had its capital at Hastināpur in the adjoining District of Meerut, and at a more historical date as being included in the dominions of Prithwī Rāj, the Chauhān ruler of Delhi. Authentic history first shows us the country around Muzaffarnagar at the time of the Musalmān conquest in the 13th century, and it remained a dependency of the various dynasties who ruled at Delhi until the final dissolution of their empire. The earliest waves of colonists probably consisted of Aryan settlers, Brāhman and Rājput. They were succeeded by the Jāts, who occupied the whole southern portion of the District, where their descendants still form the chief landowning class. At a later date, the Gūjars took possession of the poorer tracts which the Jāts have left unoccupied, and they, too, are still to be found as *samīndūrs*. Finally, with the Muhammadan irruptions, bodies of Shaikhs, Saiyids, and Pathāns entered Muzaffarnagar, and parcelled out among themselves the remainder of the territory.

History.

Tīmūr paid one of his sanguinary visits to the District in 1399, when all the infidel inhabitants whom he could capture were mercilessly put to the sword. Under Akbar, Muzaffarnagar was included in the *sarkār* of Sahāranpur. During the 17th century, the Saiyid family of Bārha rose to great eminence, and filled many important offices about the court. Their ancestors are said to have settled in Muzaffarnagar about the

year 1350, and to have enjoyed the patronage of the Saiyid dynasty which ruled at Delhi in the succeeding century. In 1414, Sultān Khizr Khān conferred the control of Sahāranpur on Saiyid Salim, the chief of their fraternity; and from that time forward they rose rapidly to territorial power and court influence. Under Akbar and his successors, various branches of the Bārha stock became the leading landowners in the province. They were celebrated as daring military leaders, being employed by the emperors on all services of danger, from the Indus to the Narbadā. It was mainly through their aid that the victory near Agra was won in 1707, by which Bahādur Shāh (I) made good his claim to the imperial title. The part which they bore in the revolution of 1712, when Farrukh Siyar was elevated to the throne, belongs to the general history of India. As a reward for the important services rendered on that occasion, Saiyid Abdullah was appointed Wazir of the empire, and Saiyid Husain Ali was made commander-in-chief. On their fall in 1721, the power of the Bārha family began to wane, until, in 1737, they were almost exterminated on a pretext of a rebellious design, by their inveterate enemy, the Wazir Kamar-ud-din.

During the whole of the disastrous 18th century Muzaffarnagar suffered from the same Sikh incursions which devastated the remainder of the upper Doāb. The Sikhs were assisted in their raids by the Gūjars, whose roving semi-nomad life made them ever ready to join in rebellion against the Government of the time. As regularly as the crops were cut, Sikh chieftains poured their predatory hordes into the Doāb, and levied an organized black-mail. The country was divided between them into regular circuits, and each chieftain collected requisitions from his own circuit only. It was during this period of unsettled and anarchic insecurity that those mud forts began to spring up which became in time so characteristic of the upper Doāb. In 1788 the District fell into the hands of the Marāthās, under whom the famous military adventurer, George Thomas, was appointed "Warden of the Marches," and endeavoured with some success to prevent the constant raids across the Jumna. The Begam Sumrū of Sardhana in MEERUT DISTRICT held large possessions in the southern *parganas* at the end of the 18th century.

After the fall of ALIGARH in 1803, the whole Doāb as far north as the Siwālik Hills came, without a blow, under the power of the British. A final Sikh invasion occurred in the following year, encouraged by the advance of Holkar's forces; but it was promptly suppressed by Colonel Burn, who drove the intruders back across the river.

The first incident which broke the course of civil administration was the Mutiny of 1857. On the news of the outbreak at MEERUT, the Magistrate of Muzaffarnagar, who was then in weak health and about to go on leave, issued orders that all the public offices should be closed. This measure naturally produced a general impression that British rule was suspended. At first there was no open rebellion, and the semblance of the Government was kept up, but plunder and incendiarism went on unmolested. At length, on the 21st of June, the 4th Irregulars rose in revolt and murdered their Commanding Officer as well as another European, after which they marched off to Shāmli. Five days later, a party of the 3rd Cavalry arrived at the town; and on the 1st of July Mr. R. M. Edwards came in from Sahāranpur with a body of Gurkhas, and took charge of the administration. Vigorous measures were at once adopted to repress crime and collect revenue, the good effects of which became quickly apparent. The western *parganas*, however, remained in open revolt; and the rebels of Thāna Bhawan attacked Shāmli, where they massacred 113 persons in cold blood. Reinforcements shortly after arrived from Meerut; and Thāna Bhawan, being evacuated by the rebels, had its walls and gates razed to the ground. After this occurrence no notable event took place, though the troops were kept perpetually on the move, marching back and forwards along the bank of the Ganges, and watching the mutineers on the opposite shore. Order was restored long before the end of the Mutiny.

There are no important Hindu buildings, but pious Muham- Archæolo-
madans have erected many mosques and tombs in different parts of the District. Several buildings at KAIRANA date from the 16th and 17th centuries; at Majherā, 18 miles south-east of Muzaffarnagar, there are some 16th century tombs of the Saiyids; and at Ghausgarh, 21 miles north-west, are the remains of a fort

built by Najib Khān, the Rohilla, and a fine mosque erected by his son.

The
people.

The District contains 15 towns and 913 villages in the District. Population has risen steadily: 1872, 690,107; 1881, 758,444; 1891, 772,874; and 1901, 877,188. There are four *tahsils*—MUZAFFARNAGAR, KAIRANA, JANSATH, and BUDHANA, the headquarters of each being at a town of the same name. The chief towns are the municipalities of MUZAFFARNAGAR, the administrative headquarters of the District, KAIRANA and KANDHLA. The principal statistics of population in 1901 are shown below:—

Tahsil.	Area in square miles.	Number of—		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Muzaffarnagar	464	3	264	239,064	515	+ 13·6	6,759
Kairāna ...	464	5	256	224,679	484	+ 10·9	5,339
Jānsath ...	451	4	244	216,411	480	+ 10·6	4,995
Budhāna ...	287	3	149	197,034	686	+ 12·3	5,510
District Total...	1,666	15	913	877,188	527	+ 13·4	22,603

Budhāna, which has the densest population, has the smallest area of inferior *khādar* land. Between 1891 and 1901 the District shared in the general prosperity of the upper Doāb, which profited by the high prices in 1896-97 when famine attacked other parts of the Provinces. Hindus number 607,000 or 69 per cent. of the total; Muhammadans, 255,000 or 29 per cent.; and Jains 10,150 or 1·2 per cent. The number of Aryās is 3,000, and this form of belief is rapidly increasing. More than 99 per cent. of the population speak Hindustāni. A small colony of emigrants from Sind still use Sindī.

Among the Hindus, Chamārs (leather-workers and labourers) number 135,000, followed by the Jāts (83,000) who are excellent cultivators; Kahārs (labourers, cultivators, and fishermen), and Brāhmans, with 47,000 each, come next. Rājputs include 29,000 Hindus and 24,000 Musalmāns, and Baniās 29,000, many of whom are Jains. Among the castes peculiar to the western Districts of the United Provinces are the Jāts, the Gūjars (agriculturists, 31,000), Sainīs (cultivators, 26,000), and Tagās (agriculturists, 10,000). The Bauriyās (726) are a criminal tribe peculiar to this District, the members of which steal and pass base money all over India. They are confined to a tract in the extreme west of the District where they were settled by Government. The most numerous Musalmān caste is that of the Julāhās or weavers (29,000); but the Saiyids, who have been referred to in the history of the District, are very important, though they only number 14,000. The Shaikhs include 26,000 and Pathāns, 12,000, Telis (oil-pressers) 14,000, and Kassābs (butchers) 14,000. The Jhojhās (8,000) and Gārās (6,000) are excellent cultivators found chiefly in this District and in Sahāranpur. The population is largely agricultural and 49 per cent. are supported by occupations connected with the land. General labour includes 11 per cent. and personal services 10 per cent.

Out of 1,402 Christians in 1901, native Christians numbered 1,259, of whom nearly 1,200 were Methodists. These are all recent converts of the American Methodist Mission, which has a branch here. The American Presbyterian Church also commenced work in 1887.

The most striking feature of the methods of cultivation is the high standard set by the Jāts. Manure is not confined to the area immediately surrounding the village site, but each field of good land is manured in turn. This is largely due to the importance of the sugarcane crop, which requires much manure and careful cultivation. The injurious saline efflorescence called *reh* is found most abundantly in the Jumna *khādar* and near the Eastern Jumna Canal, and occasionally along the West Kālī Nadi and the Ganges Canal.

The tenures are those found in most parts of the United Provinces. In 1890 there were 1,347 *zamīndāri*, 1,066 *bhaiyā-chārā*, and 579 *patthāri mahāls*. The principal agricultural

Caste and
occupa-
tion.

Christian
Missions.

General
agricultu-
ral condi-
tions.

Chief
agricultu-
ral statis-
tics and
crops.

statistics are shown below for 1903-04, the areas being in square miles:—

<i>Tahsil.</i>	Total.	Cultivated.	Irrigated.	Culturable waste.
Muzaffarnagar ...	464	334	127	47
Kairāna ...	464	291	131	82
Jānsath ...	451	307	115	59
Budhāna ...	287	235	104	12
Total ...	1,666	1,167	477	200

The most important food grains are wheat and *gram*, the areas under which in 1903-04 were 445 and 189 square miles respectively, or 38 and 16 per cent. of the net area cropped. A more valuable crop is, however, sugarcane, with an area of 110 square miles. Rice is increasing in importance, especially in the case of the finer varieties, and covered 86 square miles. Cotton is a valuable crop, but was only grown in 22 square miles, chiefly in Budhāna. Indigo cultivation has almost died out.

Improvements in agricultural practice.

The development of the canal system—especially the extension of canal irrigation to the tract between the Kālī Nadi and Hindan—has been an important factor in the agricultural condition, and it has been assisted by drainage operations which have led to the extension of cultivation by 10,000 acres in the north-west corner of the District alone. The normal area cultivated is about 66 per cent. of the whole. Muzaffarnagar wheat is celebrated throughout the Provinces, and carefully selected seed is exported to several other Districts. From 1895 to 1900 loans were freely taken under the Agriculturists Loans Act, the total advances being about Rs. 60,000, but the annual amounts since then have fallen to about Rs. 1,500 or Rs. 1,000. Advances under the Land Improvement Act only amount to about Rs. 1,000 annually.

Cattle, horses, and sheep.

The domestic breed of cattle is inferior, and the best cattle are imported from the Punjab. The *khādar* is, however, noted as a grazing-ground where breeders bring cattle. Horse-breeding is very popular, and there are about 20 Government stallions and

600 branded mares. Every year in March a large horse show is held at Muzaffarnagar, where about 1,000 animals are exhibited. In 1903 the supervision of horse-breeding in this District was transferred from the Civil Veterinary to the Remount department. Rājputs, Jāts, and Gūjars are the chief breeders. Sheep are kept for their wool and meat, and goats for milk and meat.

Few Districts are so well protected by canals as Muzaffar-Irrigation. nagar. Almost every part of the upland area is commanded, the western portion by the Eastern Jumna Canal, the centre by the Deoband branch of the Upper Ganges Canal, and the east by the latter main canal and the Anūpshahr branch. More than 1,000 square miles are commanded and 450 could be irrigated annually. In 1903-04, 340 square miles were irrigated by canals and 130 by wells, other sources only supplying 7 square miles. Well irrigation is especially required in the western tract to supplement the supply from the Eastern Jumna Canal. The usual method of supply is by a leather bag with a rope and pulley worked by oxen; but the Persian wheel is used in the west of the District. The Canal department has constructed and maintains more than 500 miles of drains.

The chief mineral product of value is *kankar* or nodular Minerals. limestone, and this is scarce. *Reh*, a saline efflorescence of varying composition, is used for glass-making, and a few other purposes.

There are few manufactures of importance. Cotton weaving Arts and Manufactures. supports about 3 per cent. of the population. At Kairāna calico printing is carried on to a small extent for a local market; and ornamental curtains are made there and at a few other places. Good country blankets are manufactured, especially at Gangerū, and are exported. A coarse blue faience is made at Mirānpur, but this is inferior to the products of other Districts; *papier-mâché* is prepared in small quantities at the same place. Two small indigo factories are still worked. The use of iron sugar mills has led to the establishment of depôts for their supply and repair in many towns.

The most important article of export is wheat, which has Commerce. obtained a good name and commands a high price in the European market. Nearly 30,000 tons of wheat were exported annually

between 1897 and 1901 from Muzaffarnagar and Khatauli stations. Large quantities of unrefined sugar are also exported, usually by railway, but the trade with the Punjab is partly carried on by means of pack-camels. The other exports are rice and oilseeds.

**Railways
and Roads.**

The North-Western Railway from Delhi to Sahāranpur passes through the centre of the District from south to north, and has four stations. The Oudh and Rohilkhand Railway just touches the District in the north-east corner, but hardly affects it. A light railway has been sanctioned from Shāhdara in the Meerut District to Sahāranpur, which will tap a rich tract in the west of this District.

There are only 78 miles of metalled roads and 321 miles of unmetalled roads. All but 35 miles are maintained from local funds. Avenues are kept up along 150 miles. Good village roads are incompatible with easy canal irrigation, and the local roads are often extremely bad, especially in the northern part of the Jumna Canal tract. They are best in the south of the District. The Ganges *khādar* has also poor communications. The Ganges is crossed by two boat bridges, and there are two main ferries over the Jumna.

The Ganges Canal is used for transit of grain and timber, but the rivers are little used as means of communication.

**District
staff.**

The District is divided into four *tahsils* and 17 *parganas*, and the normal District staff includes, besides the Collector, four full-powered assistants, one of whom is a Covenanted Civilian, when available, the rest being Deputy Collectors recruited in India.

**Civil
Justice
and
Crime.**

There are two Munsiffs in the District, which is included in the jurisdiction of the Subordinate Judge of Sahāranpur and in the Civil and Session Judgeship of the same name. The District has a bad reputation for murders and cattle-theft, while gang dacoities are not uncommon. The Gūjars are particularly turbulent, and the Bauriyās and Gipsy tribes—such as Sānsiyās Kanjars, and Nats—are responsible for many thefts and burglaries. Infanticide was formerly very prevalent, but is not suspected now.

Famine.

Nothing is known of the history of famines in this District before British rule, but it probably suffered less than the

Districts further south in the many severe visitations which devastated the Doāb. Scarcity was felt in 1803, and again in 1824, and famine in 1837, when Rs. 40,000 of revenue were remitted. The Eastern Jumna Canal was opened in 1830, and the Ganges Canal in 1854. Owing to these, the famine of 1860-61 was not much felt. The Anūpshahr branch of the Ganges Canal was, however, commenced as a relief work. In 1868-69 the protection of the canals was even more marked, and large stores of grain existed, while distress was further relieved by the demand for work on the Sind, Punjab, and Delhi (now called the North-Western) Railway. Numbers of immigrants poured in from Bikaner and western Rājputāna. Since 1869 the District has practically escaped famine, and high prices in 1877, 1896, and 1900 were a source of profit to the agricultural inhabitants, though immigrants in distressed circumstances were numerous. The opening of the Deoband branch canal in 1880 has protected an important tract.

The District was acquired in 1803 and at first part was Land included in the Sahāranpur District, and part administered by the Resident at Delhi. In 1824 the present District was Revenue adminis-
tration.
formed by creating a sub-collectorship at Muzaffarnagar, which became a separate District in 1826. The early settlements were thus part of those for the SAHARANPUR DISTRICT. Quinquennial settlements were made in 1825 and 1830, the latter being extended till 1840. Operations for the first regular settlement began with measurements in 1836 and 1838, when the soil was classified into circles and average rent rates obtained which formed the basis of assessment. The rent rates were really calculated from valuations of produce, and the method of division, as rent was generally paid in kind, and in many villages where the tenure was *bhayāchārū* there were no rents, as the co-sharers cultivated practically the whole area. The total demand was 11·2 lakhs calculated at two-thirds of the assets, and the settlement lasted 20 years. War, famine, and pestilence swept over the District before the next settlement operations which began in 1860, and the new revenue at half assets was also 11·2 lakhs. In this settlement rent rates were calculated on an average of the rates paid in previous years. Inquiries were made with a view to

making a permanent settlement which was not granted, and the assessment was raised in various tracts in 1870, where it was found inadequate. The last settlement was completed in 1892 for 30 years, and the revenue was fixed at 15.1 lakhs rising to 15.6 lakhs. The assessment was based on recorded rents, corrected where necessary ; but the area for which rents were not paid was as high as 47.5 per cent. of the total, chiefly owing to the large proprietary cultivation. The revenue amounted to 48 per cent. of the assessable assets. The incidence varied from R. 1-3-0 to Rs. 3-6-0, and the average was Rs. 2-6-0 per acre.

The collections on account of land revenue and total revenue (in thousands of rupees) are shown below :—

		1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	12,20,	12,18,	15,55,	15,59,
Total revenue	...	15,02,	18,01,	22,05,	21,92,

Local
self-gov-
ernment.

There are three municipalities : MUZAFFARNAGAR, KANDHLA, and KAIRANA ; and 11 towns are administered under Act XX of 1856. In 1903-04 the District board had an income of 1.1 lakhs and an expenditure of 1.4 lakhs. The expenditure on roads and buildings was Rs. 64,000.

Police
and Jails.

The District Superintendent of Police is assisted by 3 inspectors, and is in charge of 75 officers and 296 men of the regular police, besides 209 municipal and town police, and 1,277 village, road, and canal watchmen. The average daily number of inmates in the jail in 1903 was 168.

Educa-
tion.

The District takes a medium place in the Provinces as regards the literacy of its population, of whom 2.6 per cent. (4.7 males and .1 females) can read and write. In 1880-81 there were 135 schools under Government inspection attended by 3,779 scholars, and in 1900-01, 156 with 6,366 scholars. In 1903-04, 194 such schools contained 7,404 scholars including 192 girls, besides 398 private schools with 5,533 scholars, of whom 157 were girls. Of the public schools 2 were managed by Government and 114 by the District and municipal boards. Out of a total expenditure of Rs. 32,000,

Rs. 4,000 were met from fees and Rs. 28,000 from local and municipal funds.

In 1903 there were 7 hospitals and dispensaries, with accommodation for 65 in-patients. The number of patients treated was 70,000, of whom 1,000 were in-door patients, and 4,600 operations were performed. The total expenditure was Rs. 12,600, chiefly met from local and municipal funds.

In 1903-04, 29,000 persons were vaccinated, representing 33 per 1,000 of population. Vaccination is only compulsory in the municipalities.

(H. R. Nevill, *District Gazetteer*, 1903; J. O. Miller *Settlement Report*, 1892.)

Muzaffarnagar Tahsil.—A *tahsil* situated in the centre of the Muzaffarnagar District, United Provinces, and stretching north-east to the Ganges, lying between 29° 22' and 29° 45' N. and 77° 27' and 78° 7' E., with an area of 464 square miles. It includes 5 *parganas*, Muzaffarnagar, Baghra, Charthāwal, Pur Chhapār, and Gordhaupur. The population has risen from 206,496 in 1891 to 239,064 in 1901. The *tahsil* contains 264 villages and 3 towns: MUZAFFARNAGAR, the District and *tahsil* headquarters, population 23,444, PUR (6,384), and CHARTHAWAL (6,236). In 1903-04 the land revenue was Rs. 4,03,000 and cesses were Rs. 51,000. The *tahsil* lies chiefly on the upland area of the District, but *pargana* Gordhaupur is situated in the Ganges *khādar*, and is a low-lying swampy tract which is in a state of chronic depression in spite of attempts to drain it. In 1894 the inhabitants of this *pargana* were removed owing to the fear that the GOHNA LAKE would flood the whole area when it burst, and the tract is still largely waste. The *tahsil* is well irrigated by the Upper Ganges Main Canal and the Deoband branch. In 1903-04, out of 334 square miles cultivated, the irrigated area was 127 square miles.

Kairāna Tahsil.—The north-western *tahsil* of Muzaffarnagar District, United Provinces, lying between 29° 19' and 29° 42' N. and 77° 2' and 77° 30' E., with an area of 464 square miles. It includes five *parganas*; Kairāna, Jhinhāna, Shāmlī, Thāna Bhawan, and Bidauli, and was formerly known as Shāmlī. Population has increased from 200,157 in 1891 to 224,679 in

1901. The *tahsīl* contains 5 towns, *viz.* KAIRANA, the headquarters, population 19,304, THANA BHAWAN (8,861), SHAMLI (7,478), JALALABAD (6,822), and JHINJHANA (5,094), and 256 villages. In 1903-04 the land revenue amounted to Rs. 3,86,000 and cesses to Rs. 50,000. The river Jumna forms the western boundary, and the adjoining tract lies low and is intersected by *jhīls* and watercourses. The eastern half of the *tahsīl* is, however, part of the upland tract and is irrigated by the Eastern Jumna Canal. The cultivated area was 291 square miles in 1903-04 and the irrigated area 131.

Jānsath Tahsīl.—The south-eastern *tahsīl* of the Muzaffarnagar District, United Provinces, lying between 29° 10' and 29° 36' N. and 77° 36' and 78° 6' E., with an area of 451 square miles. The population rose from 193,533 in 1891 to 216,411 in 1901. The *tahsīl* contains 4 towns, KHATAULI, population 8,695, MIRANPUR (7,209), JANSATH (6,507), the *tahsīl* headquarters, and BHUKARHERI (6,316), and 244 villages. In 1903-04 the land revenue amounted to Rs. 3,60,000 and cesses to Rs. 47,000. The Ganges bounds the *tahsīl* on the east, and the low land on the bank of the river is swampy; but the greater part of the *tahsīl* lies on the upland and is protected by the Upper Ganges Main Canal and the Anūpshahr branch. In 1903-04 the area cultivated was 307 square miles, of which 115 were irrigated.

Budhāna Tahsīl.—The south-western *tahsīl* of the Muzaffarnagar District, United Provinces, lying between 29° 12' and 29° 27' N. and 77° 9' and 77° 42' E., with an area of 287 square miles. The population has risen from 172,688 in 1891 to 197,034 in 1901. There are 2 towns, with a population exceeding 5,000, KANDHLA, population 11,563, and BUDHANA, the *tahsīl* headquarters (6,664), and 149 villages. The demand for land revenue amounted to Rs. 4,09,000 and for cesses to Rs. 50,000 in 1903-04. The *tahsīl* is the most thickly populated in the District, and supports 686 persons per square mile, as compared with a District average of 527; it is also the most closely cultivated. In 1903-04 the area cultivated was 235 square miles, of which 104 were irrigated. The Eastern Jumna Canal and the Deoband branch of the Upper Ganges Canal provide canal irrigation.

Bhūkarheri.—Town in *tahsīl* Jānsath, District Muzaffarnagar, United Provinces, lying in 29° 30' N. and 77° 57' E., 15 miles from Muzaffarnagar. Population (1901) 6,316. The inhabitants are chiefly Jāts, who attained considerable power in the days of Pathān supremacy. There is an old tomb of a saint who is revered in northern India by the Hindus as Gharīb Nāth, and by Muhammadans as Gharīb Shāh.

Budhāna Town.—Headquarters town of the *tahsīl* of the same name, Muzaffarnagar District, United Provinces, situated in 29° 17' N. and 77° 29' E., 19 miles south-west of Muzaffarnagar. Population (1901) 6,664. During the Mutiny the place was held by the rebels, but was retaken in September, 1857. It lies close to the Hindan, but the main site is raised, and is fairly healthy. The town is administered under Act XX of 1856, with an annual income of Rs. 1,000. Besides the *tahsīl* it contains three schools and a dispensary.

Charthāwal.—Town in *tahsīl* and District Muzaffarnagar, United Provinces, lying in 29° 33' N. and 77° 36' E., 7 miles north-west of Muzaffarnagar. Population (1901) 6,236. Under native rule the place was the headquarters of an *āmīl*; but it is now a small agricultural town, administered under Act XX of 1856, with an annual income of about Rs. 1,500.

Jalālābād.—An old town in *tahsīl* Kairāna, District Muzaffarnagar, United Provinces, situated in 29° 37' N. and 77° 27' E., 21 miles from Muzaffarnagar. Population (1901) 6,822. The town is said to have been founded by a Pathān named Jalāl Khān in the reign of Aurangzeb. A mile away lie the ruins of the celebrated fort Ghausgarh, made by the Rohilla leader, Najīb Khān, with a beautiful mosque which was built by his son, Zābita Khān. Jalālābād was often sacked by the Marāthās during the rule of Zābita Khān, and a Marāthā still holds a small grant close by. During the Mutiny the Pathāns of this place were quiet, and one of their leaders did good service as *tahsīldār* of THANA BHAWAN after its capture. The town is administered under Act XX of 1856, the annual income being about Rs. 2,300. There are 2 schools with more than 100 pupils.

Jānsath Town.—Headquarters town of *tahsīl* of same name, Muzaffarnagar District, United Provinces, situated in 29° 19' N. and 77° 51' E., 14 miles from Muzaffarnagar. Population (1901) 6,507. The town is famous as the home of the Jānsath Saiyids, who held the chief power in the Delhi empire in the early part of the 18th century. Jānsath was sacked and destroyed by a Rohilla force, under the orders of the Wazīr, Kamar-ud-dīn, in 1737, and many Saiyids were slain or exiled; but some of their descendants still live in the town. It is administered under Act XX of 1856, with a total income of about Rs. 2,000. Jānsath contains a *tahsīlī*, an anglo-vernacular school opened by private subscription, and a dispensary. Much has been done lately to improve the place by paving the streets and drains.

Jhinjhāna.—Town in *tahsīl* Kairāna, Muzaffarnagar District, United Provinces, situated in 29° 31' N. and 77° 13' E., on the left bank of the Kathā, 30 miles from Muzaffarnagar. Population (1901) 5,094. The town is the home of a family of Shaikhs who have resided here from an early date. It contains a *dargāh* of a Muhammadan saint built in 1495 and several monuments of the Shaikhs, the chief being a mosque and tomb built in 1623, decorated with coloured tiles. Jhinjhāna is administered under Act XX of 1856, the income being about Rs. 1,700. It was formerly very dirty; and although the streets have recently been paved, it is still unhealthy.

Kairāna Town.—Municipality and headquarters of *tahsīl* of same name, Muzaffarnagar District, United Provinces, situated in 29° 24' N. and 77° 12' E. It is the terminus of a metalled road from Muzaffarnagar. The population is increasing slowly and was 19,304 in 1901. Mukarrab Khān, physician to Jahāngīr and Shāh Jahān, received the town and surrounding country as a grant. He built a *dargāh* and laid out a beautiful garden with a large tank, and the town also contains several mosques dating from the 16th and 17th centuries. Kairāna is built partly on the low-lying Jumna *khādar* and partly on the rising slope to the upland plain, and has a clean, well-paved bazar. The town was constituted a municipality in 1874, and in the ten years ending 1901 the average income and expenditure were about Rs. 12,000.

In 1903-04 the income was Rs. 16,000, chiefly derived from octroi (Rs. 12,000). The expenditure was Rs. 18,000. Ornamental curtains are made here by pasting small pieces of looking-glass on coloured cloth. There is a considerable amount of traffic in grain with both the Punjab and the railway, and a small calico printing industry. Besides the *tahsīlī* there are a *munsiffī*, dispensary, and two schools.

Kāndhla.—A municipality in *tahsīl* Budhāna, District Muzaffarnagar, United Provinces, situated in 29° 41' N. and 77° 8' E. It lies near the Eastern Jumna Canal, 29 miles south-west of Muzaffarnagar. Population (1901) 11,563. The town is situated on low ground and the neighbourhood is swampy. The more important streets are metalled and drained. Kāndhla was constituted a municipality in 1872, and the average income and expenditure for ten years ending 1901 were Rs. 6,700. In 1903-04 the income was Rs. 11,000, chiefly from octroi (Rs. 6,600), and the expenditure Rs. 11,000. There is a considerable local trade in grain, cotton, and cloth, which is manufactured here. The *tahsīlī* school had 130 pupils in 1904.

Khataulī.—Flourishing town in *tahsīl* Jānsath, District Muzaffarnagar, United Provinces, situated in 29° 17' N. and 77° 44' E. It lies on the North-Western Railway and on the road from Meerut to Roorkee. Population is increasing steadily and was 8,695 in 1901. The town is of some age, and contains 4 large Jain temples and a large *sarai* which was built by Shāh Jahān. It first became of importance during the Bihār famine of 1874, when all the surplus grain in the District was exported from the station. The streets have recently been paved and masonry drains constructed. Khataulī is administered under Act XX of 1856, the annual income being about Rs. 3,000. Its trade is chiefly connected with the export of grain and sugar, and is largely in the hands of Jain grain-dealers. The *tahsīlī* school has 64 pupils, and an aided Jain school 38.

Mirānpur.—A small town in *tahsīl* Jānsath, District Muzaffarnagar, United Provinces, situated in 20° 17' N. and 77° 57' E., 20 miles from Muzaffarnagar. Population (1901) 7,209. The town is the home of a family of Saiyids

descended from a member of the Chhatraurī branch of the famous Bārha Saiyids. Early in 1858 it was attacked by the Bijnor rebels, but successfully held by British troops. Mirānpur is administered under Act XX of 1856, the annual income being about Rs. 2,000. At one time there was a large local trade in rice, sugar, salt, and grain; but the opening of the railway diverted trade to KHATAULI and MUZAFFARNAGAR. Blankets are still made to a large extent, and a coarse blue pottery and *papier-mâché* goods are also manufactured. There are two small schools.

Muzaffarnagar Town.—Municipality and headquarters town of the District and *tahsīl* of the same name, United Provinces, situated in 29° 28' N. and 77° 41' E. It lies on the main road from Meerut to Roorkee and Hardwār and on the North-Western Railway. The population is increasing rapidly: 1872, 10,793; 1881, 15,080; 1891, 18,166; 1901, 23,444. In 1901 Hindus numbered 12,847 and Musalmāns 9,519. The town was founded by the son of Muzaffar Khān, Khān-i-Jahān, in the reign of Shāh Jahān, about 1633, close to the site of an older town known as Sarwat. It remained a place of little importance, but in 1824 became the headquarters of a sub-collectorship of the Sahāranpur District, and two years later the Muzaffarnagar District was formed. It is a closely-built town, crowded with small streets, but is well situated on high land above the Kālī Nadi, to which the drainage is carried. Besides the ordinary offices there are a town hall, high and middle schools, and male and female hospitals. There are no resident officials besides those of the ordinary District staff. The American Presbyterian and Reformed Methodist Missions have branches here. Muzaffarnagar was constituted a municipality in 1872. The average income and expenditure during ten years ending 1901 was Rs. 22,000. In 1903-04 the income was Rs. 35,000, chiefly derived from octroi (Rs. 21,000) and house-tax (Rs. 6,000), and the expenditure Rs. 46,000. A drainage and paving project was completed in 1903 at a cost of more than Rs. 30,000, and the town is now very well drained. The place owes its prosperity largely to the large export trade in wheat and sugar, and the only considerable manufacture is that of blankets. Every year in March a horse show is held here.

The high school contains 230 pupils, the *tahsili* school 160, and a girls' school 35.

Pur.—A small town in *tahsīl* and District Muzaffarnagar, United Provinces, situated in 29° 39' N. and 77° 51' E., 16 miles north of Muzaffarnagar on the metalled road to Roorkee. Population (1901) 6,384. The town is surrounded by fine grove and contains some good brick houses; but the drainage is defective. In the low waste land close by an important camp is formed for artillery practice every cold weather. The town is administered under Act XX of 1856, the annual income being about Rs. 1,500.

Shāmli.—A decaying town in *tahsīl* Kairāna, Muzaffarnagar District, United Provinces, situated in 29° 27' N. and 77° 18' E. It lies on the metalled road from Muzaffarnagar to Kairāna. Population (1901) 7,478. The town was originally known as Muhammadpur Zanardār, and formed part of the grant made to Mukarrab Khān, physician to Jahāngīr and Shāh Jahān. The town was built later by a follower of Mukarrab Khān's, called Shyām. In 1794 it was the residence of a Marāthā commandant, who was suspected of intriguing with the Sikhs. Lakwā Dādā, the Marāthā governor, sent George Thomas against the place. Thomas stormed it, and killed the commandant and his principal adherents. In 1804 Colonel Burn was surrounded near this place by an overwhelming force of Marāthās, who were joined by the people of the town, but was relieved by the opportune advance of Lord Lake. During the Mutiny the *tahsildār* of Shāmli gallantly held the town and kept communications open for several months, but was defeated and slain by the Shaikhzādas of Thāna Bhawan in September, 1857. The headquarters of the *tahsīl* and *munsiffi* were removed to KAIRANA owing to a terrible epidemic of fever. The place was once a municipality, but decayed, and is now administered under Act XX of 1856, the annual income being about Rs. 2,500. Four schools are maintained here.

Thāna Bhawan.—Town in *tahsīl* Kairāna, District Muzaffarnagar, United Provinces, situated in 29° 35' N. and 77° 25' E. It lies on an unmetalled road, 18 miles north-west of Muzaffarnagar. Population (1901) 8,861. In the

Ain-i-Akbarī the *pargana* is called Thāna Bhīm; but the present name is said to be derived from an old temple of Bhawānī, which is still much resorted to. The town was a centre of disaffection in 1857, when the inhabitants, headed by their Kāzī, Mahbūb Ali Khān and his nephew, Ināyat Ali, broke into open rebellion. Among other daring feats, they captured the *tahsīlī*, then at SHAMLI, and massacred the 113 men who defended it. Thāna Bhawan was soon after taken by the Magistrate with some Sikh and Gurkha levies after a fight of 7 hours. The walls and gates were levelled to the ground and no further disturbances took place. The town decayed after the Mutiny, but the population has increased in the last 30 years. It contains a primary school and some 17th century mosques and tombs. Act XX of 1856 is in force, and the annual income from the house-tax is about Rs. 2,500.

Boundaries, configurations and river system.

Meerut District (Merath).—A District in the United Provinces, lying between 28° 33' and 29° 18' N. and 77° 7' and 78° 12' E., with an area of 2,354 square miles. It is bounded on the north by the Muzaffarnagar District and on the south by Bulandshahr, while the Ganges divides it on the east from Morādābād and Bijnor, and the Jumna on the west from the Punjab Districts, Karnāl and Delhi. On the banks of these great rivers are stretches of inferior low-lying *khādar* land. The rest of the District is, for the most part, a level upland, the edges of which are scored by ravines. This may be divided into three main tracts. The western division stretching almost to the Upper Ganges Canal is a tract of extraordinarily rich and uniform soil, except immediately above the rivers Jumna and Hindan. East of this lies a shallow depression with a very poor natural drainage. The third tract stretches to the high banks of the Ganges, and is characterized by the presence of sandy dunes which are scattered about in various directions in the eastern portion, but form a well-defined ridge in the west.

Besides the Jumna and the Ganges the most important river is the HINDAN, which runs through the west of the District and has a considerable area of *khādar* land. Two small streams called Chhoiyā, and a cut called the Abū Nālā carry off part of the drainage of the central depression and the eastern tract

into the ill-defined bed of the KALI NADI EAST. In the extreme east of the District the Būrhgangā, or old Ganges, forms a chain of swamps close below the old high bank.

The botany of the District presents no peculiarities. There is very little natural jungle, and grazing land is chiefly found in the Ganges and Junna *khādar*, and to a less extent along the Hindan. The District is, however, well wooded, and groves cover 21 square miles. The commonest tree is the mango, but the *bel* and guava are largely grown for fruit, and *shisham* is planted in the road and canal avenues.

Meerut is situated entirely in the Ganges alluvium, and *Geology*. *kankar* and saline efflorescences are the only minerals found.

Leopards are fairly common in the Ganges *khādar* and *Fauna*. ravines, but tigers are extremely rare. Antelope are numerous in most parts of the District; Meerut is famous for wild pigs and the pig-sticking competition held annually for the Kādir (*khādar*) cup in March or April is well-known. Other animals found include the wolf, fox, jackal, hog-deer, and *nīlgai* (*Portax pictus*). Game birds are numerous. Duck and teal are found along the Būrhgangā and other rivers, and in the larger swamps in the interior. Snipe, geese, black and gray partridges, quail, pigeons, and sandgrouse are also common.

The comparatively high latitude and elevated position of Meerut make it one of the healthiest Districts in the plains of India. From November to March, the weather is cool and invigorating, hoar-frost being frequently found in January at an early hour of the day. The hot westerly winds begin in April and the rains set in about the end of June. The mean temperature is about 77°; but it varies from 57° in January to 91° in May and June.

The District is practically the meeting-place of the Bengal Rainfall. and Bombay monsoon currents. The average rainfall for 30 years has been 29 inches; but it varies in different parts, and the south-west of the District receives less than the north-east. Considerable fluctuations occur, and in 5 years ending 1895, the average was 47 inches, while it sometimes falls below 20 inches.

The District is connected with the earliest traditions of the lunar race of the Hindus. A small hamlet on the high bank

of the Ganges is believed to mark the main site of the great city of Hastināpur, the capital of the Kauravas and Pāndavas, which was washed away by the Ganges. The Asoka pillar, now standing on the ridge at DELHI, is said to have been removed from near Meerut city, and remains of Buddhist buildings have been discovered near the Jāma Masjid. In the 11th century A.D., the south-western part of the District was held by Har Dat, the Dor Rājā of Baran or BULANDSHAHR, who was defeated by Mahmūd of Ghazni in 1018. According to tradition the north of the District was held by the Tagās, who were driven south and east by the Jāts. The Meos were called in by the Gahlots and expelled the Dors. The first undoubted Muhammadan invasion was that of Kutab-ud-dīn, the general of Muhammad Ghorī, in 1192, when the city of Meerut was taken and all the Hindu temples were converted into mosques. Under succeeding Sultāns we hear little of the District, which may therefore be considered to have escaped any notable misfortune, until the Mughal invasion in 1398. Timūr swooped down upon Meerut with more than ordinary Mughal barbarity and was met with equal Hindu obstinacy. At the fort of Lonī, many of the Rājputs burned their own houses, with their women and children within, and then went out to sell their lives as dearly as they could. After the capture, Timūr ordered the massacre of all the Hindu prisoners in his camp, whom he himself represents as numbering 100,000 persons. He then went on to the sack of Delhi, and returned to the town of Meerut, then ruled by an Afghān chief named Iliās. Timūr first made his approaches by mining, and on the second day carried the walls by storm. All the males were put to the sword, and the fortifications and houses of the Hindus razed to the ground. Thence his army proceeded northward along the two great rivers, taking every fort, town, and village they passed.

The first establishment of the Mughal dynasty in the 16th century, and the immediate neighbourhood of their court, gave Meerut a period of internal tranquillity and royal favour. The valley of the Jumna became a favourite hunting resort for the imperial family and their great officers. Pleasure-gardens and game-preserves were established in the low-lying tracts just opposite Delhi; while it was for the purpose of watering one of

these that the Eastern Jumna Canal was first designed. After the death of Aurangzeb, Meerut, though nominally subject to the Delhi emperor, was really ruled by local chieftains; the Saiyids of Muzaffarnagar in the north, the Jāts in the south-east, and the Gūjars along the Ganges and in the south-west. It was also exposed to the same horrors of alternate Sikh and Marāthā invasions which devastated the other parts of the upper Doāb; while the Jāts and Rohillas occasionally interposed, to glean the remnant of the plunder which remained from the greater and more fortunate hordes.

From 1707 till 1775, Meerut was the scene of one perpetual strife; and it was only rescued from anarchy by the exertions of a European military adventurer, Walter Reinhardt or Sombro, one of the many soldiers of fortune who were tempted to try their destinies in upper India during the troubled decline of the Delhi dynasty. After taking part in the massacre at PATNA 1763, Reinhardt established himself at SARDHANA in one of the northern *parganas* of Meerut; and on his death in 1778, left his domains to his widow, generally known as the Begam Sumrū, from the assumed name of her husband. This remarkable woman was of Arab descent, and originally followed the trade of a dancing-girl. After her marriage with Reinhardt, she was baptized into the Roman Catholic Church, to which she became a considerable benefactress. Meanwhile, the southern portion of the District still remained in its anarchic condition under Marāthā rule, until the fall of Delhi in 1803, when all the country in his possession between the Jumna and the Ganges was ceded by Sindhia to the British. The Begam, who had up till that time given active assistance to Sindhia, thereupon made submission to the new Government, to which she remained constantly faithful till her death in 1836.

Meerut has few historical incidents to show during the early British period; but it has been rendered memorable by the active part which it took in the Mutiny of 1857, being the place where the first outbreak occurred in upper India. From the beginning of the year, disquieting rumours had been afloat among the native troops, and the greased-cartridge fiction had spread widely through their ranks. In April, a trooper named Brijmohan informed his comrades that he had used the new

cartridges, and all would have to do so shortly; but within a few days, Brijmohan's house was set on fire, and from that time acts of incendiarism became common. On the 9th of May, some men of the 3rd Bengal Cavalry, who had refused to use the cartridges were condemned to ten years' imprisonment. Next day, Sunday, May the 10th, their comrades took the fatal determination to mutiny; and at 5 P.M. the massacre of Europeans in the city began.

The subsequent events belong rather to imperial than to local history, and could not be adequately summed up in a brief *résumé*. It must suffice to say that, throughout the Mutiny, the cantonments remained in the hands of the British forces, and the District was on the whole kept fairly clear of rebels. Meerut was more than once threatened by Walidād Khān, the rebellious chieftain of Mālāgarh in the Bulandshahr District; but his demonstrations were never very serious. The greatest peril lay in the threatened attack by rebels from Rohilkhand, which was successfully warded off. Indeed, it is a noticeable fact that the very city where the Mutiny broke out; and where the first massacre took place, was yet held by a small body of Europeans, surrounded by hundreds of thousands of disaffected natives, under the very shadow of Delhi, from the beginning to the end of that desperate struggle.

Archæo-
logy.

Though many places are connected by tradition with the events related in the Mahābhārata, such as Hastināpur, BAGHPAT, GARHMUKTESAR, PARICHHATGARH, Pūth, and Barnāwā, very ancient temples or other archæological remains have not been discovered. A mosque built by Balban stands at Garhmuktesar, and there are a few Muhammadan buildings dating from the Mughal dynasty at MEERUT.

The
people.

The District contains 27 towns and 1,494 villages. The population is rising steadily : 1872, 1,276,167; 1881, 1,313,137; 1891, 1,391,458; 1901, 1,540,175. The increase between 1891 and 1901 (10·6 per cent.) was six times as great as the Provincial average. There are 6 *tahsils*, MEERUT, GHAZIABAD, MAWANA, BAGHPAT, SARDHANA, and HAPUR, the headquarters of each being at a town of the same name. The chief towns are the municipalities of MEERUT, the District headquarters, HAPUR, SARDHANA, GHAZIABAD, MAWANA, and the notified areas of

BARAUT, BAGHPAT, PILKHUA, and SHAHDARA. The principal statistics of population in 1901 are shown below :—

<i>Tahsīl.</i>	Area in square miles.	Number of—		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Meerut ...	364	5	280	342,143	940	+ 4·7	18,048
Ghāziābād ...	493	9	332	273,518	562	+ 10·6	7,122
Mawānā ...	431	4	248	200,399	465	+ 11·2	3,398
Bāghpat ...	405	6	218	297,506	735	+ 12·7	7,285
Sardhana ...	250	1	124	180,141	721	+ 6·3	5,198
Hāpur ..	411	2	292	243,468	592	+ 12·9	6,910
District Total ...	2,354	27	1,494	1,540,175	654	+ 10·6	47,961

Of the total population 74 per cent. are Hindus, 23 per cent. Musalmāns, 1 per cent. Jains, ·8 per cent. Christians, and Aryās number 5,000. The great density of population in Meerut *tahsīl* is due to the large city of Meerut, while Mawānā, which has the lowest, includes a considerable area of Ganges *khādar*. More than 99 per cent. of the inhabitants speak the Hindustāni dialect of Western Hindi.

Among the Hindus the most numerous caste is that of the Chamārs (leather-dressers and labourers) who number 223,000, and form 20 per cent. of the Hindu population. They are followed by the Jāts, who include 184,000, and are the most industrious agriculturists and hold a larger area both as proprietors and cultivators than any other caste. Brāhmans number 121,000; Rājputs, 79,000; Baniās, 59,000; Gūjars, 58,000; Tagās, 41,000; Ahīrs, 25,000; and Bhangīs or sweepers, 44,000. The Jāts, Gūjars, and Tagās are not found in the centre and east of the Provinces, and the Tagās (agriculturists) are more numerous here than in

Castes and their occupations.

any other District. The most numerous Muhammadan tribe is that of the Shaikhs, 50,000; followed by the Rājputs, 46,000; Julāhās (weavers), 33,000; Pathāns, 19,000; Saiyids, 15,000; and Tagās, 20,000. More than 49 per cent. of the population are supported by agriculture, 11 per cent. by general labour, 10 per cent. by personal services, 3 per cent. by weaving, and nearly 3 per cent. by grain-dealing.

Christian Missions.

In 1901 there were 9,315 native Christians in the District, of whom 7,400 were Methodists and 1,100 Roman Catholics. The four Missions at work are those of the Roman Catholics, Church Missionary Society, the American Methodist, and the Reformed Presbyterian Churches. Sardhana is the chief station of the Roman Catholics, who commenced work in the 18th century under the Begam Sumrū there. The Church Missionary Society's Mission dates from 1815, and the other two Missions are of recent institution. The latter admit converts easily, and chiefly labour among the lower classes.

General agricultural conditions.

As is usual in the upper Doāb, the Jāts are the finest cultivators, and all good land is manured whether near the village site or not. The soil varies from sand to thick clay; but the greater portion is a fertile loam, and most of the District is capable of irrigation by canals or wells. The Ganges and Jumna and, to a smaller extent, the Hindan *khādars* are precarious tracts; but the District as a whole ranks as one of the finest in the United Provinces.

Chief agricultural statistics and crops.

The tenures are those common in the United Provinces. More than 50 per cent. of the total area is held in *bhaiyāchārā* tenure; nearly 22 per cent. in imperfect *pattidāri*, and the rest in perfect *pattidāri* and *zamindāri* in equal proportions. The principal statistics of cultivation in 1903-04 are shown below (in square miles):—

Tahsil.			Total.	Cultivated.	Irrigated.	Culturable waste.
Meerut	...	...	364	277	122	29
Ghāziābād	...	...	493	349	180	69
Mawāna	...	...	431	278	89	94
Bāghpat	...	...	405	336	190	22
Sardhana	...	...	250	201	82	18
Hāpur	...	...	411	320	112	34
Total			2,854	1,756	775	266

Wheat and *gram* are the most important food grains, covering an area of 634 and 241 square miles respectively, or 36 and 14 per cent. of the net area cropped. Maize and *jowār*, with 189 and 164 square miles, are also important. The most valuable of the other crops are sugarcane, which covers 179 square miles, and cotton, which is grown in 60 square miles.

In the *khādar*, cultivation depends chiefly on the season, and in dry years considerable areas may be sown. The striking feature of the District during the last 30 years is the increase by about 50 per cent. in the area under cane, which is now the crop from which the tenants pay their rent and the *zamīndārs* their revenue. The area cropped in two consecutive harvests in the same year, especially with maize in the autumn and wheat mixed with peas, &c., in the spring is also increasing. The area under cotton has declined, and indigo is only grown for a few of the large *zamīndārs*. There is a small, but steady, demand for loans under the Agriculturists' Loans Act, which amount to about Rs. 2,000 annually; but advances under the Land Improvement Act are rarely taken. Out of Rs. 16,000 advanced in 10 years ending 1900, Rs. 11,000 were advanced in the last year. A great deal has been done to improve the drainage of the District, by deepening and straightening some of the rivers such as the East Kālī Nadi and its tributaries, the Chhoiyās, and by making cuts in other places. In the south-west of the District an embankment has been made to prevent flooding from the Jumna.

Private enterprise has done something to improve the ordinary inferior breed of cattle, and several *zamīndārs* have imported good bulls from HISSAR. The best of the cattle in use have been imported from the same place, but many good animals are now bred locally. Horse-breeding has become a very important business. Stables for a Government stud were established at Bābūgarh near Hāpur in 1823, and many *zamīndārs* turned their attention to horse-breeding. The mares were subsequently disposed of, though stallions are still kept by Government. There has been a considerable improvement in the last 30 years, and chargers are bred for the native cavalry and mounted police. Besides the stallions at Bābūgarh, 12 others were maintained by Government in 1903, when the supervision

Improvements in agricultural practice.

Cattle, ponies, and sheep.

of horse-breeding was transferred from the Civil Veterinary to the Remount department. Good mules are also bred from Government donkey stallions. The sheep and goats of the District are of the ordinary inferior breed.

Irriga-
tion.

About 40 to 60 per cent. of the cultivated area is irrigated according to the season. In 1903-04 canals supplied 494 square miles, wells 271, and other sources 10. The west of the District is supplied by the EASTERN JUMNA CANAL, the centre by the UPPER GANGES CANAL, and the east by the Anūpshahr branch of the latter. The area irrigated by canals is about double that irrigated from wells, and no other source is important. Canals have to a large extent superseded wells; but the area irrigated in the eastern tract has benefited especially, as well irrigation was rare. It is only in parts of the Sardhana and Hāpur *tahsils* that well irrigation supplies a larger area than canals.

Minerals.

The chief mineral product is *kankar*, which occurs in blocks as well as in nodules, and is used for road-metalling and for making lime, as well as for building purposes. Up to 1833 salt was largely manufactured, and a little saltpetre is still prepared. The saline efflorescence called *reh*, which contains carbonate of soda, is used for making country glass, and also in dyeing and washing clothes.

Arts and
Manufac-
tures.

The most important industry is tanning, though there is no large tannery. Much of the outturn is exported to Cawnpore and Calcutta, but a fair amount is made up on the spot into shoes and sent to Delhi. Cotton-weaving is carried on largely at Meerut and several other places, but simply for the local market. More than half the raw cotton grown is exported to Cawnpore and Calcutta. Two cotton presses at Hāpur employed 263 persons in 1904. The North-West Soap Company, Limited, at Meerut employs about 40 hands, and an ice factory about 20. There are also 11 indigo factories and a small flour mill and oil mill. Blankets are made at Nirpura in the Sardhana *tahsil*, ornamental pottery at Bahādurgarh in Hāpur *tahsil*, and cheap cutlery, glass bangles, jewellery and furniture are turned out at a few centres.

Com-
merce.

The exports consist largely of wheat, sugar, oil-seeds, and cotton, while the imports are metals, cloth, building materials, *ghi*, drugs, and spices. The municipalities are the chief centres

of trade, especially Meerut, Hāpur, and Ghāziābād. Internal traffic is enormous. The sugar goes largely to the Punjab and Rājputāna, while wheat is exported to Europe. A very large proportion of the trade finds its way to Delhi. Timber and bamboos are brought to Meerut from the forests further north by the Upper Ganges Canal and the Ganges.

Trade has been greatly fostered by the improvement of ^{Railways and Roads.} communications. The oldest railway is the East Indian, which just cuts through the south-west corner of the District. It was followed by the North-Western, which passes through the middle of the District. In 1900 a branch of the Oudh and Rohilkhand Railway was opened, which traverses the southern part of the District. Another important branch of the same line connects Meerut with Hāpur, and will be continued through BULANDSHAHR to KHURJA. The rich tract between the North-Western Railway and the Jumna is to be opened up by a light railway from Shāhdara on the East Indian Railway opposite Delhi to Sahāranpur.

The total length of metalled roads is 216 miles, which is only exceeded in one District in the Provinces. 92 miles are Provincial and the rest local. There are also 392 miles of unmetalled roads maintained from local funds. Avenues are maintained on about 180 miles of road. The western part of the District is most in need of better communications, and these will be supplied by the light railway referred to above.

The upper Doāb was ravaged by famine at frequent inter-^{Famine.}vals before British rule, and the disorder of the 18th century frequently caused distress; but Meerut is not specially mentioned by the native historians. There was frequent distress in the early years of the 19th century, and the famine of 1837 was exceptionally severe. In 1860, after the disastrous effects of the Mutiny, famine was imminent; but the railway works in the south-east of the District gave employment to thousands. The famines of 1868 and later years hardly affected the District adversely, and relief works have chiefly been required for starving immigrants. This result is largely due to the perfect system of canal irrigation, and the sturdy nature of the peasantry. In 1896-97, when famine raged elsewhere, the Jāts

of Meerut prayed openly for a continuance of the high prices which gave them such handsome profits.

District
sub-divi-
sions and
staff.

The Collector is usually assisted by a Joint and Assistant Magistrate belonging to the Indian Civil Service, and by 5 Deputy Collectors recruited in India, all residing at Meerut. There is a *tahsildār* at the headquarters of each of the 6 *tahsils*.

Civil
Justice
and
Crime.

The District and Sessions Judge has jurisdiction over the whole District, and also civil jurisdiction over the Sikan-drābād *tahsīl* of the Bulandshahr District. He is aided by an Assistant Judge, a Subordinate Judge and by two Munsiffs. In 1904 there were two additional Munsiffs, and an additional Judge was sanctioned for three years. A few village Munsiffs have also been appointed. There is a special Cantonment Magistrate, with an assistant at Meerut. As usual the most common forms of crime are burglary and petty theft; but murder, robbery, and dacoity are more frequent than in most Districts. Cases of rioting and criminal trespass are very common, and the Gūjars in the Ganges and Jumna *khādars* are notorious as cattle thieves. Female infanticide was practised by Gūjars and Jāts, especially the former; but has nearly died out.

Land
Revenue
adminis-
tration.

The area comprised in the District was acquired in 1803, and was at first administered as part of the District of Sahāranpur, of which it eventually formed the southern division with a Collector at Meerut. In 1818 a separate District was made, which was further sub-divided in 1824 by the removal of parts of what are now Bulandshahr and Muzaffarnagar. The early settlements were simply based on the previous demands and consisted of two for a year each, and two for 3 years each, the last being extended up to 1815, when a settlement was made for 5 years. No records exist of the subsequent arrangements till the first regular settlement was made between 1835 and 1837. There were signs of the coming competition for land, but rents were still mostly in kind. The assessment was based on rates ascertained by converting average produce at market values, the rates being modified according to the condition of villages. A large part of the District had formed the *jāgīr* of the Begam Sumrū, and this lapsed in 1836. Her system had been one of rackrent, qualified by an intimate

knowledge of the cultivators, and liberal advances. The total demand fixed for the whole District was 18·3 lakhs. The second settlement was made between 1865 and 1870, when the demand was raised to 21·8 lakhs, though the share of the assets taken had been reduced from 70 to 50 per cent. In this settlement, also, rates were calculated on produce, having regard to soil classification. The last settlement was completed in 1901. It was based on the rental assets, but involved a careful soil classification and the fixing of standard circle rates, which were of special importance, as 49 per cent. of the area was not subject to cash rents, most of it being under proprietary cultivation. A very minute analysis of the rents actually paid was thus required, and the proportionate rental values of different soils was ascertained. The rents paid by occupancy tenants were enhanced in many cases, and the revenue finally fixed was 29·9 lakhs, representing 48 per cent. of the corrected rental assets. The incidence per acre of cultivation is Rs. 2-14-0, which is the highest for any District in the Provinces. It varies in different parts of the District from Rs. 2 near the Ganges *khādar* to more than Rs. 4 in the west. The collections on account of land revenue and total revenue are shown below, in thousands of rupees :—

		1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	22,25,	22,11,	26,30,	27,95,
Total revenue	...	27,04,	34,00,	40,57,	44,21,

Besides the five municipalities, Meerut, Ghāziābād, Hāpur, Sardhana, and Mawānā, four other towns which were formerly municipalities became notified areas in April, 1904. There are also 18 towns administered under Act XX of 1856. Beyond the limits of these places, local affairs are managed by the District board, which has an annual income of more than 2 lakhs. In 1903-04 the expenditure amounted to 2·6 lakhs, of which 1·1 lakhs were spent on roads and buildings.

The District Superintendent of Police is aided by an Assistant and by 6 inspectors. There are 160 other officers and 633 men belonging to the regular police, 439 municipal and

Local self
govern-
ment.

Police
and Jails.

town police, and 2,267 village and road police. The District jail contained a daily average of 574 inmates in 1903.

Educa-
tion.

In 1901 the percentage of the population able to read and write was 3·1 (5·6 males and ·3 females) which is exactly the Provincial average. The proportion is, however, unduly raised by the considerable number of Jains, Aryās, and Christians in the District, and is distinctly lower in the case of Hindus (2·7) and Muhammadans (2). In 1880-81 there were 214 public institutions with 6,677 pupils, and these had increased to 248 with 9,849 in 1900-01. In 1903-04, 277 such schools contained 12,850 scholars, of whom 550 were girls, besides 391 private institutions with 5,235 pupils; MEERUT city contains an arts college, a normal school, and 3 high schools. Of the public institutions 162 are managed by the District or municipal boards and only two by Government. About half the total expenditure of Rs. 96,000 is met from local and municipal funds, and a quarter from fees.

Hospitals
and dis-
pensaries.

In 1903 there were 14 hospitals and dispensaries, containing accommodation for 183 in-patients. In the same year 134,000 cases were treated, including those of 1,839 in-patients, and 10,214 operations were performed. The expenditure was Rs. 19,000, chiefly met from local and municipal funds.

Vaccina-
tion.

More than 50,000 persons were successfully vaccinated in 1903-04, showing a rate of 33 per 1,000 of population. Vaccination is only compulsory in the municipalities, and in the cantonment of Meerut.

(H. R. Nevill, *District Gazetteer*, 1904; R. W. Gillan, *Settlement Report*, 1901.)

Meerut Tahsil.—Central northern *tahsil* of the Meerut District, United Provinces, co-extensive with Meerut *pargana*, and lying between 28° 52' and 29° 14' N. and 77° 27' and 77° 52' E., with an area of 364 square miles. On the west the Hindan divides it from the Baghpat and part of the Sardhana *tahsils*, but other boundaries are artificial. The population has risen from 326,054 in 1891 to 342,143 in 1901. There are 280 villages and 5 towns, of which MEERUT, the District and *tahsil* headquarters, population 118,129, and LAWAR (5,046), are the most important. The land revenue demand for 1903-04 was Rs. 5,22,000, and that for cesses Rs. 87,000. The *tahsil* has

the greatest density of population (940 to the square mile) in the District (average 654), owing to the presence of the Meerut city. Along the Hindan there is a narrow stretch of *khādar* which is liable to deterioration, but more than half the *tahsīl* is a level upland of first class soil. The eastern portion is intersected by the East Kālī Nadi and its tributaries, the two Chhoiyās and the Abū Nālā, which flow in badly-defined channels. The channel of the Kālī Nadi has been deepened and straightened, and other cuts have been made, but the drainage is still defective, and in this tract cultivation is continually interrupted by patches of *reh*. It is sandy towards the north and a well-defined sandy ridge strikes from north to south on the eastern border. Between the Hindan and the Kālī Nadi the Upper Ganges Canal provides ample means of irrigation; but east of the latter river the villages depend chiefly on wells, most of which are of masonry. The total area cultivated in 1903-04 was 277 square miles, of which 122 were irrigated.

Ghāziābād Tahsīl.—The south-western *tahsīl* in the Meerut District, United Provinces, comprising the *parganas* of Jalāl-ābād, Lonī, and Dāsna, and lying between 28° 33' and 28° 56' N. and 77° 13' and 77° 46' E., with an area of 493 square miles. The Jumna forms the western boundary. Population has risen from 247,141 in 1891 to 276,518 in 1901. The *tahsīl* contains 332 villages and 9 towns, of which the most important are GHAZIABAD, the *tahsīl* headquarters, with a population of 11,275, PILKHUA (5,859), SHAHDARA (5,540), and FARID-NAGAR (5,620). In 1903-04 the demand for land revenue was Rs. 4,85,000 and for cesses Rs. 80,000. The *tahsīl* is one of the poorest in the District and the density of population is only 562 per square mile, while the District average is 654. The Hindan passes through the western portion and the Chhoiyā, a tributary of the East Kālī Nadi, through the east. The worst tract, a sandy area cut up by ravines, lies between the Hindan and the Jumna; but the north-east corner, which forms a badly-drained basin, is also very poor. On the other hand, communications both by railway and road are excellent. The *tahsīl* is well supplied by irrigation from the Upper Ganges and Eastern Jumna Canals. Out of 349 square miles cultivated in 1903-04, 180 were irrigated. Indigo is a more important crop here than

elsewhere in the District, while sugarcane is less grown than in other *tahsils*.

Mawānā Tahsil.—North-eastern *tahsil* in Meerut District, United Provinces, comprising the *parganas* of Hastināpur and Kithor, and lying between $28^{\circ} 51'$ and $29^{\circ} 16'$ N. and $77^{\circ} 47'$ and $78^{\circ} 8'$ E., with an area of 431 square miles. The population has risen from 177,868 in 1891 to 200,399 in 1901. There are 248 villages and 4 towns, the largest of which are MAWANA, the *tahsil* headquarters (population 9,207), PARICHHATGARH (6,278), and PHALAUDA (5,214). In 1903-04 the demand for land revenue was Rs. 3,56,000 and for cesses Rs. 57,000. The *tahsil* is the most sparsely populated in the District, and only contains 465 persons per square mile against an average of 654. It consists of two distinct portions. The greater part lies in the upland area of the District, which descends by a series of ravines to the Ganges *khādar* on the east. The uplands are intersected by well marked ridges of sand and have profited enormously by the irrigation supplied from the Anūpshahr branch of the Upper Ganges Canal, as wells are difficult and costly to make. The *khādar* is damp, and immediately below the edge of the upland lies a series of swamps marking an old bed of the Ganges which now flows on the eastern boundary; a great part of it is only fit for grazing. In 1903-04 out of a cultivated area in the *tahsil* of 273 square miles only 89 were irrigated.

Bāghpat Tahsil.—North-western *tahsil* in Meerut District, United Provinces, comprising the *parganas* of Bāghpat, Baraut, Kutānā, and Chhaprauli, and lying between $28^{\circ} 47'$ and $29^{\circ} 18'$ N. and $77^{\circ} 7'$ and $77^{\circ} 29'$ E., with an area of 405 square miles. Population has risen from 259,656 in 1891 to 297,506 in 1901. There are 218 village and 6 towns, the chief of which are BARAUT (population 7,703), BAGHPAT, the *tahsil* headquarters, (5,972), KHEKRA (8,918) and CHHAPRAULI (7,058). In 1903-04 the demand for land revenue was Rs. 6,65,000, and for cesses Rs. 1,07,000. The density of population is high, being 735 per square mile, and the *tahsil* is one of the best in the District. It lies between the Jumna and Hindan, but even the narrow *khādars* of those rivers are fairly fertile, and a great part of the *tahsil* consists of an excellent loam, while ample irrigation

is provided by the Eastern Jumna Canal. In 1903-04 out of a total cultivated area of 336 square miles, 190 were irrigated.

Sardhana Tahsil.—*Tahsil* in Meerut District, United Provinces, comprising the *parganas* of Sardhana and Barnāwa, and lying between $29^{\circ} 1'$ and $29^{\circ} 16'$ N. and $77^{\circ} 19'$ and $77^{\circ} 43'$ E., with an area of 250 square miles. Population has risen from 168,692 in 1891 to 180,141 in 1901. There are 124 villages and only one town, SARDHANA, the *tahsil* headquarters, with a population of 12,467. The demand for land revenue in 1903-04 was Rs. 3,70,000 and for cesses Rs. 59,000. The *tahsil* is thickly populated and supports 721 persons to the square mile. It lies in the north of the uplands of the District, and its two *parganas* are separated by the river Hindan which is also joined by the Krishnī. Both these rivers are fringed by ravines; but the *tahsil* is a fertile tract well irrigated by the Upper Ganges and Eastern Jumna Canals. In 1903-04 the cultivated area was 201 square miles, of which 82 were irrigated.

Hāpur Tahsil.—South-eastern *tahsil* of Meerut District, United Provinces, comprising the *parganas* of Hāpur, Sarāwā, Garhmuktesar, and Pūth, and lying between $28^{\circ} 31'$ and $28^{\circ} 54'$ N. and $77^{\circ} 41'$ and $78^{\circ} 12'$ E., with an area of 411 square miles. Population increased from 212,047 in 1891 to 243,468 in 1901. There are 292 villages and 2 towns, HĀPUR, the *tahsil* headquarters, population 17,796, and GARHMUKTESAR, (7,616). The demand for land revenue in 1903-04 was Rs. 4,04,000 and for cesses Rs. 68,000. The density of population is low for this District, and the *tahsil* only supports 592 persons to the square mile. On the east there is a considerable area of *khādar* land bordering on the Ganges which forms the eastern boundary; above this lies a broad stretch of upland, much of which is intersected by ridges of sand; but irrigation from the Anūpshahr branch of the Upper Ganges Canal has rendered the cultivation of most of this productive. In the east the Kālī Nadi runs through high *bhūr*, and other streams flow in narrow deep cut channels. Many drains have been made, to carry off the flood water from above, but the area is still precarious. Out of 320 square miles cultivated in 1903-04, the area irrigated was 112 square miles.

Sardhana Estate.—An important estate in the Meerut District, United Provinces. The area of the estate in 1904 was about 28 square miles. The total demand for rent and other dues was 1·3 lakhs, and the Government land revenue and cesses amounted to Rs. 53,000. The headquarters of the estate are at SARDHANA TOWN. It belongs to a family of Muswī Saiyids who claim descent from Ali Mūsā Razā, the eighth Imām. These Saiyids resided at Paghmān near Kābul, but were expelled on account of services rendered to Sir Alexander Burnes in his Kābul Mission, and subsequently to the English in the retreat from Kābul. A pension of Rs. 1,000 a month was given to the family which settled at Sardhana. During the Mutiny Saiyid Muhammad Jān Fishān Khān, the head of the family, raised a body of horse and did good service both in the Meerut District and before Delhi. As a reward the title of Nawāb Bahādur, and confiscated estates assessed at Rs. 10,000 per annum, were conferred on Jān Fishān Khān with concessions as to the revenue assessed. The pension was also made permanent. During the lifetime of the first Nawāb, and for some time after, the family added largely to the estate, but speculations in indigo and personal extravagance caused losses. The estates were taken under the Court of Wards in 1895, and in 1901 the debts were paid off by a loan from Government amounting to 10 lakhs. The present Nawāb, Saiyid Ahmad Shāh, and his two predecessors were sons of Jān Fishān Khān, who died in 1864.

Bāghpat Town.—Notified area and headquarters of *tahsīl* of same name, Meerut District, United Provinces, situated in 28° 57' N. and 77° 13' E., 30 miles west of Meerut by metalled road, near the Jumna. Population 5,972 (1901). Bāghpat is identified with the Vyāghraprastha, or place of tigers of the Mahābhārata, and its name is said to have been changed from Bāgpat to Bāghpat by one of the Delhi emperors. The town is divided into two portions, the *kasba* or agricultural quarter, and the *mandī* or commerical quarter. Besides the *tahsīlī* it contains a dispensary, and a branch of the American Methodist Mission. From 1869 to 1904 the place was administered as a municipality, with an average income and expenditure of Rs. 6,000, the chief tax being octroi. It has now been

constituted a notified area. Formerly Bāghpat was the chief centre of the sugar trade with the Punjab, but Meerut and other towns have now taken its place to a large extent. In 1904 it contained 3 schools with 137 pupils.

Baraut.—Notified area in *tahsīl* Bāghpat, District Meerut United Provinces, situated in 29° 6' N. and 70° 16' E., 27 miles north-west of Meerut. Population 7,703 (1901). During the Mutiny some of the Jāts who owned the town were conspicuous for disloyalty, and their property was confiscated and now forms part of the SARDHANA ESTATE. The town is situated in a network of canal distributaries and irrigation is forbidden near it, for sanitary considerations. The American Presbyterian Mission has a branch here. Baraut was administered as a municipality from 1870 to 1904, the average income and expenditure being about Rs. 6,500. Under the new constitution as a notified area, a tax on circumstances and property has been substituted for octroi. Iron buckets and cauldrons are made here, and there was formerly a large trade in *ghī* and safflower. In 1904 the town contained a middle school with 120 pupils, and 3 aided primary schools with 140.

Chhaprauli.—Town in *tahsīl* Bāghpat, District Meerut, United Provinces, situated in 29° 12' N. and 77° 11' E., 35 miles north-west of Meerut. Population 7,058 (1901). It is said to have been founded by Jāts in the 8th century. In the 18th century the Jāts of Mīrpur, who had been almost ruined by the incursions of the Sikhs, migrated here, and added to the population and prosperity of the town. There is a large colony of Jain Baniās who are people of some wealth. The town is administered under Act XX of 1856 with an income of about Rs. 2,000. It is increasing in importance as a centre for the collection and export of wheat and sugar. There is a primary school.

Farīdnagar.—Town in *tahsīl* Ghāziābād, District Meerut, United Provinces, situated in 28° 46' N. and 77° 41' E., 16 miles south-west of Meerut. Population 5,620 (1901). The town was founded by Farīd-ud-dīn Khān in the reign of Akbar. It is administered under Act XX of 1856, with an annual income of about Rs. 1,600, and contains a primary school.

Garhmuktesar.—Town in *tahsīl* Hāpur, District Meerut, United Provinces, situated near the Ganges, in 28° 47' N. and

78° 6' E., on the Oudh and Rohilkhand Railway and Delhi-Morādābād road. Population 7,616 (1901). The place is said to have been a part of Hastināpur, the great city of the Kauravas; but the site now pointed out as Hastināpur is 25 miles away. It contains an ancient fort which was repaired by a Marāthā leader in the 18th century. The name is derived from the great temple of Mukteswara Mahādeo, dedicated to the goddess Gangā, which consists of four principal shrines, two on the Ganges cliff and two below it. Close by is a sacred well whose waters are said to cleanse from sin, surrounded by 80 *satī* pillars. The principal festival is held at the full moon of Kārtik, when about 200,000 pilgrims collect, the numbers being much larger at intervals of 6, 12, and 40 years. The cost of the fair is met from a tax on carts, and cattle, and the rents of shops. Horses were formerly exhibited, but the numbers are decreasing. On the other hand, mules are now brought in increasing numbers. The town also contains a mosque built by Ghiyās-ud-dīn Balban in 1283, and a branch of the American Methodist Mission. Garhmuktesar is administered under Act XX of 1856, about Rs. 2,000 being raised by taxation. There is little trade except in timber and bamboos, which are rafted down the river from the Dūn and Garhwāl.

Ghāziābād Town.—Municipality and headquarters of *tahsil* of same name, Meerut District, United Provinces, situated in 28° 40' N. and 77° 26' E. Ghāziābād lies on the Grand trunk road from Calcutta to Peshāwar, and is a junction for the East Indian, North-Western, and Oudh and Rohilkhand Railways. Population (1901) 11,275. The town was founded in 1740 by the Wazīr Ghāzi-ud-dīn, son of Asaf Jāh, ruler of the Deccan, and it was formerly called Ghāzi-ud-dīnnagar. In 1763 Sūraj Mal, the Jāt Rājā of Bharatpur, met his death at the hands of the Rohillas near this place. In May, 1857, a small British force from Meerut encountered and defeated the Delhi rebels, who had marched here to hold the passage of the Hindan. The main site contains two broad metalled bāzārs at right angles, with masonry drains and good brick-built shops. Extensions have recently been made, including two fine markets, called Wrightganj and Wyerganj, after the Collectors who founded them. The police-station and town-hall are located in the large *sarai*

built by Ghāzī-ud-dīn. There is also a dispensary. Near the station the railway companies have built several barracks and houses. The Church Mission Society and the American Methodists have branches here. Ghāziābād has been a municipality since 1868. In 10 years ending 1901, the average income and expenditure have been Rs. 13,000. In 1903-04 the income was Rs. 17,000, chiefly from octroi, Rs. 13,000, and the expenditure Rs. 18,000. There is a considerable trade in grain, hides, and leather. The town contains an anglo-vernacular school supported by the Church Missionary Society with 120 pupils in 1904, a *tahsīlī* school with 147, 8 aided primary schools with 211, and a girls' school with 27 pupils.

Hāpur Town (or *Hāpar*).—Municipality and headquarters of the *tahsīl* of the same name, in the Meerut District, United Provinces, situated in 28° 43' N. and 77° 47' E. on the metalled road from Meerut to Bulandshahr, and on the Morādābad-Delhi branch of the Oudh and Rohilkhand Railway. The population rose from 14,977 in 1891 to 17,796 in 1901. Hindus number 10,038 and Musalmans 7,518. The town is said to have been called Haripur after Har Dat, the Dor chieftain who founded it late in the 10th century ; but another derivation is from *hāpar* meaning an orchard. The town formed part of the *jāgīr* of Perron, the French general in the service of the Marāthā chief Sindhia. He established a vast system of grants for his disabled veterans, which was maintained by the British for many years. In 1805 Ibrāhīm Alī, the *tahsīldār*, defended the place against Amīr Khān, the Pindāri freebooter. During the Mutiny, Wālidād Khān of Mālāgarh threatened Hāpur, but was obliged to retire by the loyal Jāts of Bhatauna. The town is surrounded by several fine groves, and the site in the centre near the Jāma Masjid, which was built during the reign of Aurangzeb, stands high. Around the town are numerous small excavations often full of stagnant water, and the largest of these is connected with the Chhoiyā Nālā, a tributary of the KALI NADI EAST, which drains most of the town. The drainage system has been greatly improved of late years. The principal public offices are the *tahsīlī*, dispensary, and anglo-vernacular school. The Church Missionary Society and American Methodist Mission have branches here. Hāpur was constituted a municipality in

1872, and in the 10 years ending 1901 the average income and expenditure have been Rs. 17,000 or Rs. 18,000. In 1903-04 the income was Rs. 25,000, chiefly derived from octroi, Rs. 17,000. The expenditure was Rs. 22,000.

There is a considerable local trade in sugar, grain, cotton, bamboos, and brass vessels. Two steam cotton gins employ 263 hands. In 1904 there were 11 schools with 408 pupils.

Khekrā.—Town in *tahsīl* Bāghpat, District Meerut, United Provinces, situated in 28° 52' N. and 77° 17' E., 26 miles west of Meerut. Population 8,918 (1901). It is said to have been founded 1600 years ago by Ahirs who were ousted by Jāts from Sikandarpur. In the Mutiny the owners rebelled, and the land was confiscated. The place is administered under Act XX of 1856, with an annual income of about Rs. 2,000. It is rising in importance as a centre of the grain and sugar trade. Khekrā contains a primary school with 60 pupils.

Lāwar.—A large village in *tahsīl* and District Meerut, United Provinces, situated in 29° 7' N. and 77° 47' E., 12 miles north of Meerut. Population 5,046 (1901). The village belongs to the descendants of Mīr Surkh, a native of Mazandarān, who acquired 45 villages in the neighbourhood. It contains a fine house, called the Mahal Sarai built about 1700 by Jawāhir Singh, who also made the Sūraj Kund (tank) at Meerut. Lāwar is administered under Act XX of 1856 with an income of about Rs. 1,500. In 1904 the primary school here had 80 pupils.

Mawānā Town.—Municipality and headquarters of *tahsīl* of the same name, Meerut District, United Provinces, situated in 29° 6' N. and 77° 57' E., 17 miles north-east of Meerut. Population in 1901, 9,207. The town, according to tradition, was founded by Mana, a huntsman employed by the Kauravas. It contains a large brick-built tank, and on the banks of another, now ruined, stands a fine temple built in the 16th century. The municipality was constituted in 1886, and in the 10 years ending 1901 the average income and expenditure have been Rs. 5,000. In 1903-04 the income was Rs. 7,000, chiefly from a tax on circumstances and property, Rs. 3,000, and the expenditure Rs. 8,000. There is little trade and most of the inhabitants are cultivators. The town contains

2 middle schools with 136 pupils, besides 6 primary schools with 164. The American Methodist Mission has a branch here.

Meerut City.—City, military cantonment, municipality, and administrative headquarters of the Meerut District, United Provinces, situated in 29° 7' N. and 77° 43' E., 970 miles by rail from Calcutta and 931 miles by rail from Bombay. The city is the seventh largest in the United Provinces and its population has risen considerably during the last 30 years; 1872, 81,386; 1881, 99,565; 1891, 119,390; 1901, 118,129. The population in 1901 included 62,700 Hindus, 50,317 Muham-madans, and more than 4,000 Christians. 78,740 persons reside in the municipality and 39,389 in cantonments.

The derivation of the name is uncertain. According to one account it is derived from the name of an architect named Mahī, in the time of King Yudhishtira. The Jāts allege that it was founded by a colony of their caste belonging to the Mahārāshtra *gotra*. The Asoka pillar now standing on the ridge at Delhi was removed from Meerut, and remains of Buddhist buildings have been found near the Jāma Masjid. Meerut is said to have been captured early in the 11th century by Saiyid Sālār Masūd, and about the same time Har Dat, Rājā of Baran (BULANDSHAHR), built a fort here, which was one of the most celebrated in Hindustān for its strength. The fort was captured by Kutab-ud-dīn in 1192 and all the Hindu temples were converted into mosques. In 1327 a Mughal chief, Tarmshirīn Khān, made an unsuccessful attempt on the city, but it was completely sacked and destroyed by Tīmūr in 1399. Under the Mughal rule the place revived and several fine buildings were erected. The brick fort is mentioned in the Ain-i-Akbarī, and Akbar struck copper coin at Meerut. The troubled times in the 18th century were unfavourable to the growth of towns in the upper Doāb, and in 1805 it was described as 'a ruinous, depopulated town and a place of no trade.' In 1806 cantonments were first established, and population grew rapidly to 29,014 in 1847 and 82,035 in 1853. Meerut obtained an unenviable notoriety in 1857 as the spot where the Mutiny broke out in upper India. Disquieting rumours had been abroad for some time, and in April the troopers of the 3rd Cavalry refused to use the new cartridges. On May 9th, 85

men were condemned to long terms of imprisonment and the next afternoon, Sunday, May 10th, a cry was raised that the Europeans were going to seize the magazines of the Native Infantry. The men of the 20th Native Infantry seized their arms, and the Mutiny commenced. Several Europeans were shot down at once, and the bad characters of the city gathered together armed with any weapons they could find. The convicted troopers were released from jail without the slightest opposition by the guards, and the rest of the prisoners broke out. The infuriated mob of sepoys, police, hangers-on about the bazars, servants, and convicts burned and plundered the cantonments, murdering every Christian they met. In the civil station, which lies some distance away, nothing was known of the outbreak until close on 7 P.M., when the people going to church saw the blaze of burning bungalows. Even the native troops posted there remained steady till relieved. The British troops cantoned near the civil lines included a regiment of cavalry, 800 infantry, and a large force of artillery; but nothing was done by the superior military authorities, and the general organization was defective. Many of the Carabineers could not ride, and there was a want of horses. Much time was wasted in a roll-call, and when the native lines were reached after dark, they were found deserted. No pursuit was attempted, and the mutineers were allowed to reach Delhi in safety. The town was, however, held throughout the disturbances, and was the base of a small volunteer force known as the Khākī Risālā, which helped materially in the restoration of order.

The native city lies to the south of cantonments, and east of the railway line. The streets are generally of mean appearance, and are badly arranged. The oldest monuments are a mausoleum and *dargāh* erected by Kutab-ud-dīn in 1194, the former in the city, and the latter about a mile away on the site of a famous temple to Nauchandī Debī. The Jāma Masjid is said to have been built in 1019 by Hasan Mahdī, Wazīr of Mahmūd of Ghazni, and was repaired by Humāyūn. A fine *dargāh* of red sandstone was erected by Nūr Jahān, wife of the emperor Jahāngīr in 1628 in memory of a *fakīr* named Shāh Pīr, and there are some other 17th century mosques

and tombs. The great tank called the Sūraj Kund, or sun tank, was constructed in 1714, and is surrounded by numerous small temples and *sati* pillars.

The town-hall containing the Lyall library is an imposing building, the foundation-stone of which was laid in 1884 by the Duke of Connaught, then commanding the Meerut military district. In the cantonments the finest building is the church, which was built in 1821, and has a handsome spire. There are also a Roman Catholic church and a mission chapel, an asylum for the relief of distressed European and native Christians, and a club. The mall is one of the finest station roads in India. Besides being the headquarters of the ordinary District staff, Meerut is also the residence of the Commissioner of the Division of the same name, Superintending Engineers of both the Roads and Buildings and Irrigation branches of the Public Works department, and two Executive Engineers in charge of divisions of the Upper Ganges Canal. The Church Missionary Society and American Methodist church have their principal stations here, besides several branches in the District.

Meerut was constituted a municipality in 1864. During the ten years 1892—1901, the average income and expenditure have been about 2·3 lakhs, but the receipts include a loan of 7½ lakhs for water-supply taken in 1895, and the expenditure includes the cost of the works, and payment of an annual sum on account of capital and interest. In 1903-04 the total income was 2·2 lakhs, chiefly derived from octroi, 1·4 lakhs, and municipal property, fines, &c., Rs. 41,000. The expenditure of 2·5 lakhs included, general administration, Rs. 2,000, collection of taxes, Rs. 31,000, water-supply, Rs. 21,000, conservancy, Rs. 21,000, public safety, Rs. 15,000, and repayment of loans with interest, Rs. 65,000. A house tax has recently been sanctioned.

The water-works were completed in 1896. The supply is taken from the Upper Ganges Canal, 9 miles away, at a place called Bhola. The engines by which the supply is raised are worked by turbines turned by the water in the canal falls. In 1903-04 the daily consumption of water amounted to between 4 and 5 gallons per head. The drainage of the city is good, and all channels have been lined with masonry and the whole system recast within the last few years.

The normal garrison in the cantonments consists of 4 regiments of British and native cavalry and infantry, and two horse and two field batteries. The income from cantonment funds in 1903-04 was 1.4 lakhs and the expenditure 1.2 lakhs. The chief taxes are ostroï and a house tax.

The prosperity of the city was primarily due to the presence of a large cantonment, and the population was in fact greater in 1853 than in 1872. The extension of the North-Western Railway in 1867 and 1869, however, laid the foundation of a more extended trade than the supply of local needs. In 1887 a bonded warehouse was opened about a mile from the city station, with which it is connected by a branch line, and 8 or 9 lakhs of maunds of grain, and nearly as much sugar, pass through this every year. Cloth, building materials, oilseeds, spices, and *ghī* form the chief imports. Manufactures are not yet of much importance, but there are a large soap factory, a flour and an oil mill. A very important agricultural show is held annually near the Nauchandī temple, a mile from the city. The exhibits include 1,702 or 1,800 horses, besides cattle, agricultural products and implements, &c., and valuable prizes are given.

The chief educational institutions are the Meerut College and Normal school. The former was founded in 1892 at a cost of 2 lakhs raised by subscriptions, and receives an annual grant of Rs. 8,000 from Government. It had 123 pupils in 1903-04, of whom 15 were reading for a degree and 35 in the First Arts classes. The oldest school belongs to the Church Missionary Society and has 120 pupils. There are 8 other secondary schools with about 800 scholars and 4 primary schools with 159 students, of whom over 100 are girls. Among the secondary schools may be mentioned that supported by the Aryā Samāj, which is very strong here. The municipality spends about Rs. 10,000 annually on education.

Parichhatgarh.—Small town in *tahsīl* Mawānā, District Meerut, United Provinces, situated in 28° 59' N. and 77° 57' E., 14 miles east of Meerut. Population 6,278 (1901). The fort round which the town is built lays claim to great antiquity, and tradition ascribes its construction to Parikhshit, grandson of Arjuna, one of the five Pāndava brethren in the Mahābhārata, to whom is also ascribed the foundation of the town. The fort

was restored by Rājā Nain Singh on the rise of Gūjar power in the 18th century. It was dismantled in 1857, and is now used as a police-station. The town is administered under Act XX of 1856 with an income of about Rs. 1,700. The trade is local. There are branches of the Church Missionary Society and American Methodist Missions and two primary schools.

Phalauda.—Town in *tahsīl* Mawānā, District Meerut, United Provinces, situated in 29° 11' N. and 77° 51' E., 17 miles north of Meerut. Population 5,214 (1901). It is said to have been founded by a Tomar named Phalgu, whose descendants were dispossessed by Mīr Surkh, a Persian from Mazandarān. The town is a poor place, with narrow dirty streets, but has fine mango groves surrounding it. There is a *dargāh* of a saint called Kutab Shāh, where a religious fair is held annually, and the Church Missionary Society has a branch here. Phalauda is administered under Act XX of 1856 with an income of about Rs. 1,300. It contains a primary school with 75 pupils in 1903.

Pilkhua.—Notified area, *tahsīl* Ghāziābād, District Meerut, United Provinces, situated in 28° 43' N. and 77° 40' E., 19 miles south of Meerut on the Oudh and Rohilkhand Railway, and on the metalled road from Delhi to Morādābād. Population 5,859 (1901). The town is badly drained and surrounded by stagnant pools, though a small drainage cut has been made. Pilkhua contains branches of the Church Missionary Society and American Methodist Missions. From 1872 to 1904 it was administered as a municipality with an average income and expenditure of about Rs. 3,000, but it has now been declared a notified area. The chief manufacture is of country cloth, and it is specially noted for a peculiar pattern made by dyeing. There is also a considerable trade in leather and shoe-making, and the products are exported as far as Calcutta and Bombay. In 1904 there was an aided primary school with 35 pupils.

Sardhana Town.—Municipality and headquarters town of the *tahsīl* of the same name in the Meerut District, United Provinces, situated in 29° 9' N. and 77° 38' E. It lies on a metalled road 12 miles north-west of Meerut, and is 6 miles from the Sardhana station of the North-Western Railway. The population rose from 12,059 in 1891 to 12,467 in 1901.

The place is now of small importance, but it was once famous as the residence of the Begam Sumrū. According to tradition the town was founded by a Rājā Sarkat, whose family ruled till their expulsion by the Musalmāns. The place became the property of Dhusars and Bishnoīs, who were driven out by Tagās in the 18th century. Walter Reinhardt, better known by the name of Sumrū or Sombre, was a butcher by profession, and a native of Luxemburg. He came to India as a soldier in the French Army, and deserting that service, took employment with the British, where he attained to the rank of sergeant. Deserting again, he rejoined the French service at Chandernagore, and on the surrender of that settlement, accompanied M. Law in his wanderings throughout India from 1757 to 1760. In the latter year, Law's party joined the army of Shāh Alam in Bengal, and remained with the emperor until his defeat in 1760 at Gayā by Colonel Carnac, in his attempt to reconquer Bengal from the Nawāb. Sumrū next entered the service of Mir Kāsim, by whom he was employed to murder the English prisoners at Patna (PATNA DISTRICT) in October 1763. He succeeded in escaping into Oudh, and afterwards served several native chiefs, until in 1777 he entered the service of Mirza Najaf Khān, the general and minister of Shāh Alam II, and received the *pargana* of Sardhana in fief, as an assignment for the support of his battalions. He died here in the following year, and was succeeded by his widow, the Begam Sumrū, who continued to maintain the military force. This remarkable woman, the illegitimate daughter of a Musalmān of Arab descent, and the mistress of Reinhardt before becoming his wife, assumed the entire management of the estate, and the personal command of the troops, which numbered five battalions of sepoys, about 300 European officers and gunners, with 50 pieces of cannon, and a body of irregular horse.

In 1781 the Begam was baptized into the Roman Catholic Church, under the name of Johanna. Her troops rendered excellent service to the Delhi emperor in the battle of Gokulgarh in 1788, where a charge of Sardhana troops, personally led by the Begam and the celebrated adventurer George Thomas, saved the fortunes of the day at a critical moment. In 1792,

the Begam married Levassoult, a Frenchman in command of her artillery. In 1795, her European officers became disaffected, and an illegitimate son of Reinhardt, known as Zafaryāb Khān, put himself at their head. The Begam and her husband were forced to fly. In the flight the Begam's palanquin was overtaken by the rebels, and she stabbed herself to prevent falling alive into their hands; whereupon Levassoult shot himself, in pursuance of a vow that if one of them was killed the other would commit suicide. The Begam's wound, however, was but a slight one, and she was brought back to Sardhana. Another account is that the Begam had become tired of her husband, and that her self-inflicted wound was only a device to get rid of him. However, all her power passed temporarily into the hands of Zafaryāb Khān, and she was treated with great personal indignity, till she was restored to power some months later by her general, George Thomas. Henceforth the Begam remained in undisturbed possession of her estates till her death in 1836.

After the battle of Delhi, and the British conquest of the upper Doāb in 1803, the Begam submitted to the new rulers, and ever after remained distinguished for her loyalty. Her possessions were numerous, and included several considerable towns, such as Sardhana, Baraut, Barnāwa, and Dankaur, lying in the immediate neighbourhood of great marts like Meerut, Delhi, Khurja, and Bāghpat. Her income from her estates in Meerut District alone amounted to £56,721 per annum. She kept up a considerable army, and had places of residence at Khirwa Jalālpur, Meerut, and Delhi, besides her palace at Sardhana. She endowed with large sums the Catholic Churches of Madras, Calcutta, Agra, and Bombay, the Sardhana Cathedral, the Sardhana poorhouse, St. John's Roman Catholic College, where natives are trained for the priesthood, and the Meerut Catholic Chapel. She also made over a lakh of rupees to the Bishop of Calcutta for charitable purposes, and subscribed liberally to Hindu and Musalmān institutions.

Zafaryāb Khān, the son of Sumrū, died in 1802, and left one daughter, whom the Begam married to Mr. Dyce, an officer in her service. David Ouchterlony Dyce Sombre, the issue of this marriage, died in Paris, July 1851, and the

Sardhana estates passed to his widow, the Hon'ble Mary Anne Forester, daughter of Viscount St. Vincent. The palace and adjoining property have since been purchased by the Roman Catholic Mission, and the former is used as an orphanage.

The town itself lies low, and has a poor and decayed appearance. Immediately to the north is a wide parade-ground, beyond which is the quarter called Lashkarganj, founded by the Begam as a cantonment for her troops, and the old fort now in ruins. East of the town lies the Begam's palace, a fine house with a magnificent flight of steps at the entrance and extensive grounds. It formerly contained a valuable collection of paintings, but these have been sold; some of them are now in the Indian Museum, and others in Government House, Allahābād. The Roman Catholic Cathedral is an imposing building. The public offices include the *tahsīlī*, post-office, and police-station. In addition to the Roman Catholic Mission the American Methodists have a branch here.

Sardhana was constituted a municipality in 1883. The average income and expenditure in 10 years ending 1901 have been Rs. 11,000. In 1903-04 the income was Rs. 15,000, chiefly from octroi, Rs. 10,500, and the expenditure Rs. 13,000. The trade is entirely local, except for the export of grain. The town contains a middle school with 183 pupils and 6 primary schools with 280.—(H. G. Keene, *Calcutta Review*, January and April 1880.)

Shāhdara.—A notified area, *tahsīl* Ghāziābād, District Meerut, United Provinces, situated in 28° 40' N. and 77° 18' E., on the East Indian Railway, five miles from Delhi. A light railway from this place to Sahāraṇpur has been sanctioned. Population 5,540 (1901). It was founded by Shāh Jahān as a market, and was sacked in the 18th century by Sūraj Mal, the Jāt Rājā of Bharatpur, and plundered by the soldiers of Ahmaḍ Shāh Durrānī just before the battle of Pānīpat. It is badly drained and drinking water is obtained from a distance. The American Methodist and Reformed Presbyterian Missions have branches here. From 1872 to 1904 the place was administered as a municipality, with an average income and expenditure of about Rs. 3,000. It is now a notified area. The trade of the place has fallen away, and it is chiefly celebrated for

sweetmeats; but there is still a small manufacture of shoes and leather, and a little sugar-refining. In 1904 there was a primary school with 75 pupils.

Bulandshahr District.—District in the Meerut Division, United Provinces, with an area of 1,899 square miles, lying between $28^{\circ} 4'$ and $28^{\circ} 43'$ N. and $77^{\circ} 18'$ and $78^{\circ} 28'$ E. The District is situated in the DOAB or alluvial plain between the Ganges and Jumna, which form its eastern and western boundaries, dividing it from the Morādābād and Budaun Districts, and from the Punjab Districts of Delhi and Gurgaon, respectively. On the north and south lie the Meerut and Aligarh Districts. The central portion of the District forms an elevated plain flanked by strips of lowlying land, called *khādar*, on the banks of the two great rivers. The Jumna *khādar* is an inferior tract from 10 to 5 miles wide, except in the south of the District where the river flows close to its eastern high bank. The swampy nature of the soil is increased in the north by the two rivers, HINDAN and Bhuriyā, but flooding from the Jumna has been prevented by the embankments protecting the head-works of the AGRA CANAL. The Ganges *khādar* is narrower, and in one or two places the river leaves fertile deposits which are regularly cultivated. Through the centre of the upland flows the EAST KALI NADI, which has a narrow and well-defined valley which suffers from flooding in wet years. The western half contains a sandy ridge, now marked by the Māt branch of the Upper Ganges Canal, and two drainage lines known as the Patwai and Karon or Karwan. The eastern portion is drained by another channel called the Chhoiyā. The whole of this tract is a fertile stretch of country which owes much to the extension of canal irrigation.

The flora of the District presents no peculiarities. At one time thick jungle covered with *dhāk* (*Butea frondosa*) was common, but the country was denuded of wood for fuel when the East Indian Railway was first opened, and trees have not been replanted. The commonest and most useful trees are the *babūl* and *kīkar* (*Acacia arabica* and *eburnia*). The *shīsham* (*Dalbergia sissoo*), *nīm* (*Melia azadirachta*), and *pīpal* (*Ficus religiosa*) are also common. In the east the landlords have allowed the plantation of fine mango groves.

Boundaries, configuration, and river system.

Botany.

Geology.

The soil is entirely alluvium in which *kankar* is the only stone found, while the surface occasionally bears saline efflorescences.

Fauna.

The wild pig and hog-deer are found in the *khādar*. The antelope and *nīlgai* (*Portax pictus*) are found in the uplands, but are decreasing owing to the spread of cultivation. The jackal is common, and the leopard, wolf, and hyæna are occasionally met with. In the cold weather duck and snipe collect in large numbers on the ponds and marshes. Fish are not much consumed in the District, though plentiful in the rivers.

Climate and temperature.

The climate resembles that of the MEERUT DISTRICT, but no meteorological observations are made here, except a record of rainfall. The extension of canal irrigation has increased malaria, but its effects have been mitigated by the improvement of the drainage system.

Rainfall.

The average rainfall is about 26 inches, of which 24 inches are usually measured between June 1st and the end of October. Large variations occur in different years, the fall varying from under 15 to over 40 inches. There is not much difference between the amounts received in different parts of the District, but the eastern half receives slightly more than the western.

History.

The early traditions of the people assert that the modern District of Bulandshahr formed a portion of the great Pāndava kingdom of Hastināpur, and that after that city was cut away by the Ganges the tract was administered by a governor who resided at the ancient town of AHAR. Whatever credence may be placed in these myths, we know from the evidence of an inscription that the District was inhabited by Gaur Brāhmans, and ruled over by the Gupta dynasty in the 5th century of our era. Few glimpses of historical light have been cast upon the annals of this region before the advent of the Muhammadans, with whose approach detailed history begins for the whole of northern India. In 1018, when Mahmūd of Ghazni arrived at Baran (as the town of Bulandshahr is sometimes called to the present day) he found it in possession of a native prince named Har Dat. The presence of so doughty an apostle as Mahmūd naturally affected the Hindu ruler, and accordingly the Rājā himself and ten thousand followers came forth, says

the Musalmān historian, "and proclaimed their anxiety for conversion and their rejection of idols." This timely repentance saved their lives and property for the time; but Mahmūd's raid was the occasion for a great immigration towards the Doāb of fresh tribes who still hold a place in the District. In 1193, Kutab-ud-dīn appeared before Baran, which was for some time strenuously defended by the Dor Rājā, Chandra Sen; but through the treachery of his kinsman, Jaipāl, the town was at last captured by the Musalmān force. The traitorous Hindu accepted the faith of Islām and the Chaudhriship of Baran, where his descendants still reside, and own some small landed property. The 14th century is marked as an epoch when many of the present tribes inhabiting Bulandshahr first gained a footing in the region. Numerous Rājput adventurers poured into the defenceless country and expelled the Meos from their lands and villages. This was also the period of the early Mughal invasions; so that the condition of the Doāb was one of extreme wretchedness caused by the combined ravages of pestilence, war, and famine, with the usual concomitant of internal anarchy. The firm establishment of the Mughal dynasty gave a long respite of tranquillity and comparatively settled government to these harassed provinces. They shared in the administrative reconstruction of Akbar; their annals are devoid of incident during the flourishing reigns of his great successors. Here, as in so many other Districts, the proselytizing zeal of Aurangzeb has left permanent effects in the large number of Musalmān converts; but Bulandshahr was too near the court to afford much opportunity for those rebellions and royal conquests which make up the chief elements of Mughal history. During the disastrous decline of the imperial power, which dates from the accession of Bahādur Shāh in 1707, the country round Baran was a prey to the same misfortunes which overtook all the more fertile provinces of the empire. The Gūjars and Jāts, always to be found on the foreground upon every occasion of disturbance, exhibited their usual turbulent spirit; and many of their chieftains carved out principalities from the villages of their neighbours. But as Baran was at this time a dependency of Koil, it has no proper history of its own during the 18th

century, apart from that of the ALIGARH DISTRICT. Under the Marāthā rule it continued to be administered from Koil; and when that town with the adjoining fort of Aligarh was captured by the British forces in 1803, Bulandshahr and the surrounding country were incorporated into the newly-formed District.

The Mutiny of 1857 was ushered in at Bulandshahr by the revolt of the 9th Native Infantry, which took place on the 21st of May, shortly after the outbreak at Aligarh. The officers were compelled to fly to Meerut, and Bulandshahr was plundered by a band of rebellious Gūjars. Its recovery was a matter of great importance, as it lies on the main road from Agra and Aligarh to Meerut. Accordingly, a small body of volunteers was despatched from Meerut for the purpose of retaking the town, which they were enabled to do by the aid of the Dehra Gurkhas. Shortly afterwards, however, the Gurkhas marched off to join General Wilson's column, and the Gūjars once more rose in rebellion. Walidād Khān of Mālāgarh put himself at the head of the movement, which proved strong enough to drive the small European garrison out of the District. From the beginning of July till the end of September Walidād held Bulandshahr without opposition and commanded the whole line of communication with Agra. Meantime internal feuds went on as briskly as in other revolted Districts, the old proprietors often ousting by force the possessors of their former estates. But on the 25th of September Colonel Greathed's flying column set out from Ghāziābād for Bulandshahr, whence Walidād was expelled after a sharp engagement and forced to fly across the Ganges. On the 4th of October the District was regularly occupied by Colonel Farquhar, and order was rapidly restored. The police were at once reorganized, while measures of repression were adopted against the refractory Gūjars, many of whom still continued under arms. It was necessary to march against rebels in Etah early in 1858; but the tranquillity of Bulandshahr itself was not again disturbed. Throughout the progress of the Mutiny, the Jāts almost all took the side of Government, while the Gūjars and Musalmān Rājputs proved our most irreconcilable enemies.

Two important copperplate inscriptions have been found in the District, one dated A.D. 465-66 of Skanda Gupta, and another giving the lineage of the Dor Rājās. There are also ancient remains at Ahār and Bulandshahr. A *dargāh* was built at Bulandshahr in 1193, when the last Dor Rājā was defeated by the Muhammadans, and the town contains other buildings of the Muhammadan period. Archaeology.

The number of towns and villages in the District is 1,532. The Population has increased considerably: 1872, 937,427; 1881, 924,822; 1891, 949,914; 1901, 1,138,101. The temporary decline between 1872 and 1881 was due to the terrible outbreak of fever in 1879, which more than decimated the people. The increase of nearly 20 per cent. between 1891 and 1901 was only exceeded in one District in the Provinces. There are four *tahsils*, ANUPSHAHR, BULANDSHAHR, SIKANDARABAD, and KHURJA, the headquarters of each being at a town of the same name. These four towns are also municipalities and the last three are the chief towns in the District. The people.

The principal statistics in 1901 are given below:—

<i>Tahsil.</i>	Area in square miles.	Number of—		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Anūpshahr ...	444	4	378	278,152	626	+ 25.0	6,325
Bulandshahr ...	477	5	379	332,262	696	+ 17.8	9,612
Sikandarābād ...	516	7	404	260,849	505	+ 16.2	5,046
Khurja ...	462	7	348	266,838	577	+ 20.6	7,176
District Total ...	1,899	23	1,509	1,138,101	599	+ 19.8	28,159

In 1901 there were 900,169 Hindus or 79 per cent. of the total, 217,209 Musalmāns or 19 per cent., 12,298 Aryās, and 4,528 Christians. The number of Aryās is greater than in any other District in the Provinces, and the Samāj has 27 lodges or branches in this District. Practically all the inhabitants speak Western Hindī. In the north the dialect is Hindustāni, while in the south Braj is commonly used.

Castes
and occu-
pations.

Among Hindus the most numerous castes are the Chamārs (leather-workers and labourers; 183,000), who form one-fifth of the total, Brāhmans, 113,000, Rājputs, 93,000, Jāts, 69,000, Lodhas (cultivators; 64,000), Baniās, 56,000, and Gūjars, 44,000. The Brāhmans chiefly belong to the Gaur clan, which is peculiar to the west of the Provinces and Punjab, while Jāts and Gūjars are also chiefly found in the same area. The Lodhas, on the other hand, inhabit the central Districts of the Provinces. The Meos or Mīnās and Mewātīs are immigrants from MEWAT, and among other castes peculiar to this and a few other Districts may be mentioned the Orhs (weavers; 4,000), and Aheriyās (hunters; 4,000). The Musalmāns of nominally foreign extraction are less numerous than those descended from Hindu converts. The Shaikhs number 24,000, Pathāns 17,000, Saiyids 6,000, and Mughals only 3,000; while Musalmān Rājputs include 34,000, Barhais (carpenters), 15,000, Telis (oil pressers), 11,000, and Lohārs (blacksmiths), 11,000. About 51 per cent. of the population are supported by agriculture. Rājputs, both Musalmān and Hindu, Jāts, Saiyids, and Baniās are the largest landholders, and Rājputs, Brāhmans, and Jāts the principal cultivators. General labour supports 11 per cent. of the total population, personal service 9 per cent., weaving 3 per cent., and grain-dealing 3 per cent.

Christian
Missions.

Of the 4,480 native Christians in 1901, 4,257 belonged to the American Methodist Episcopal Church which started work here in 1887. Most of them are recent converts, chiefly from the lower castes. The Zenana Bible and Medical Mission and the Church Missionary Society have a few stations in the District.

General
agricul-
tural con-
ditions.

Excluding the Jumna and Ganges *khādars* the chief agricultural defect is the presence of barren *ūsar* land covered with saline efflorescences called *reh*, which occurs in badly-drained localities, and spreads in wet years. The District is remarkable for the absence of grazing-grounds, fodder crops being largely grown. Where conditions are so uniform the chief variations are due to the methods employed by different castes, among whom Ahīrs and Jāts take the first place. The Ahīrs devote most attention to the area near the village site and prefer well irrigation, while the Jāts do equal justice to all good land and use canal water judiciously. The Lodhas come next and

are as industrious as the Jāts, but want their physique. Gūjars are usually inferior.

The tenures are those common to the United Provinces; but the District is marked by the number of large estates. Out of 3,440 *mahāls* at the last settlement, 2,446 were *zamīndāri* or joint *zamīndāri*, 546 *bhaiyāchārā*, and 448 *pattidāri* or imperfect *pattidāri*. The principal statistics of cultivation in 1903-04 are shown below in square miles:—

<i>Tahsīl.</i>	Total.	Cultivated.	Irrigated.	Culturable waste.
Anūpshahr ..	444	339	158	38
Bulandshahr ..	477	376	191	46
Sikandarābād ..	516	358	150	85
Khurjā	462	345	152	72
Total ...	1,899	1,418	651	241

The chief food crops and the area occupied by each in square miles were: wheat (424), *gram* (199), maize (188), barley (227), *jowār* (156), and *bājra* (121). The area under maize has trebled in the last 25 years. *Bājra* is chiefly grown in inferior soil in the Sikandarābād and Khurjā *tahsīls*. The other most important crops are: cotton (103) and sugarcane (63), both of which are rapidly increasing in importance. On the other hand the area under indigo has declined from 120 square miles in 1885 to 25 in 1903-04.

From 1870 to 1874 a model farm was maintained at Bulandshahr and attempts were made to introduce Egyptian cotton; but these were not successful. The chief improvements effected have been the extension of canal irrigation, and its correction by means of drainage cuts. Much has also been done to straighten and deepen the channels of the rivers described above, especially the East Kālī Nadi. These have led to the extended cultivation of the more valuable staples. Very few advances have been made under the Agriculturists' Loans Act, and between 1891 and 1900 only Rs. 30,000 were given under

the Land Improvement Act. In 1903-04 the loans were Rs. 1,700. The agricultural show held annually at Bulandshahr has done much to stimulate interest in small improvements.

Cattle,
horses,
and
sheep.

An attempt was made in 1865 to improve the cattle by importing bulls from Hariāna; but the *zamīndārs* were not favourable. The ordinary cattle are poor, and the best animals used are imported from Rājputāna, Mewār or Bijnor. Horse-breeding has, however, become an important pursuit, and there are 20 stallions owned by Government in this District. The *zamīndārs* of all classes are anxious to obtain their services, and strong handsome colts and fillies are commonly seen in many parts. Mules are also bred, and ten donkey stallions have been supplied. Since 1903 horse and mule-breeding operations have been controlled by the Army Remount department. Sheep and goats are kept in large numbers, but are of the ordinary inferior stamp.

Irriga-
tion.

The District is exceptionally well provided with means of irrigation. The main channel of the Upper Ganges Canal passes through the middle of the District from north to south. Near the eastern border irrigation is supplied by the Anūpshahr branch of the same canal, while the western half of the District is watered by the Māt branch. The LOWER GANGES CANAL has its head works in this District leaving the right bank of the Ganges at the village of Naraura. Most of the wells in use are masonry, and water is raised almost universally in leather buckets worked by bullock power. In 1903-04 canals supplied 323 square miles and wells 310. Other sources are insignificant.

Minerals.

Salt was formerly manufactured largely in the Jumna *khādar*, but none is made now. The extraction of sodium sulphate has also been forbidden. There are 60 factories where crude saltpetre is produced and one refinery. Where *kankar* occurs in compact masses, it is quarried in blocks and used for building purposes.

Arts and
Manufac-
tures.

Till recently Bulandshahr was one of the most important indigo-producing Districts in the United Provinces. There were more than 120 factories in 1891, but the trade has fallen off considerably, and in 1902 there were only 47 which employed about 3,800 hands. Cotton is ginned and pressed

in the District at 12 factories, which employ more than 900 hands daily, and this industry is increasing. The owners of the factories have imported the latest machinery from England. Other manufactures are not of great importance, but the calico printing of JAHANGIRABAD, the muslins of SIKANDARABAD, the pottery of KHURJA, the rugs of JEWAR, and the wood-carving of BULANDSHAHR and SHIKARPUR deserve mention for their artistic merits. There is also a flourishing glass industry in the Bulandshahr *tahsil* where bangles and small phials and bottles are largely made. Country cloth is woven as a hand industry in many places.

Grain and cotton form the principal exports, and the Com-
weight of cleaned cotton exported is nearly 4,000 tons, having ^{merce.} doubled in the last 25 years. The imports include piece-goods, metals, and salt. Anūpshahr is a depôt for the import of timber and bamboos rafted down the Ganges; but Khurja and Dibai have become the largest commercial centres, owing to their proximity to the railway. Local trade is carried on at numerous small towns, where markets are held once or twice a week.

The East Indian Railway runs from south to north ^{Railways}
through the western half of the District. For strategic reasons ^{and Roads.} it was built on the shortest possible alignment, and thus passes some distance from the principal towns; but a branch line is under construction, which will connect Khurja and Bulandshahr and join the Oudh and Rohilkhand Railway at HAPUR in the Meerut District. A branch of the Oudh and Rohilkhand Railway from Aligarh to Morādābād and Bareilly crosses the south-east corner of the District.

There are 163 miles of metalled road and 495 miles unmetalled. The whole length of metalled roads is in charge of the Public Works department, but the cost of 109 miles of these, and the whole cost of the unmetalled roads, are met from local funds. Avenues are maintained on 257 miles. The principal line is that of the Grand trunk road from Calcutta to Delhi, branches of which leave Bulandshahr for Meerut and Anūpshahr. The only parts of the District where communications are defective are the northern Jumna *khādar* and the north-eastern and south-eastern corners of the District.

Famines.

Bulandshahr shared in the many famines which devastated the upper Doāb before British rule, and during the early years of the 19th century scarcity occurred several times. In 1837 famine was severe, and its effects were increased by immigration from Hariāna and Mārwar, and the Districts of Etāwah and Mainpurī. The worst affected tracts were the areas along the Jumna; but the construction of the Grand trunk road provided employment for many, and other works were opened. In 1860 the same tracts suffered, being largely inhabited by Gūjars, still impoverished owing to their lawlessness in the Mutiny. The Māt branch canal was started as a relief work. Rs. 32,000 were spent on relief and Rs. 50,000 advanced for purchase of bullocks and seed, much of which was repaid later, and spent in constructing dispensaries. In 1868-69, though the rains failed, there was a large stock of grain, and the spread of irrigation enabled spring crops to be sown. In 1877 and 1896-97 no distress was felt except among immigrants, and able-bodied labourers could always find work. In the latter period alone, 1,518 wells were made, and the high prices were a source of profit.

District
sub-divi-
sions and
staff.

The ordinary staff consists of a Collector assisted by one member of the Indian Civil Service and three Deputy Collectors recruited in India. There is a *tahsildār* at the headquarters of each of the 4 *tahsils*. Bulandshahr is also the headquarters of an Executive Engineer of the Upper Ganges Canal.

Civil
Justice
and
Crime.

For purposes of civil jurisdiction the District is divided between two Judgeships. The Sikandarābād *tahsil* belongs to the *munsiff* of Ghāziābād in the Meerut District, and appellate work is disposed of by the Judge of Meerut. The rest of the District is divided in two *munsiffs* with headquarters at Bulandshahr and Khurja, subordinate to the Judge of Aligarh. The additional Sessions Judge of Aligarh exercises criminal jurisdiction over Bulandshahr. The District has a bad reputation for crime, cattle-theft being especially common. There are also appreciable numbers of murders, robberies, and dacoities. The Gūjars are largely responsible for this lawlessness, and they are especially notorious for cattle-lifting.

Land
Revenue
adminis-
tration.

Part of the District was acquired by cession from the Nawāb Wazīr of Oudh in 1801, and part was conquered from

the Marāthās in 1803. For 20 years the area now included was partly in the Aligarh, and partly in the Meerut or south Sahāranpur Districts. In 1819, owing to the lawlessness of the Gūjars, a Joint Magistrate was stationed at Bulandshahr, and in 1823 a separate District was formed. The early settlements were of a summary nature, each lasting one, three, four or five years. *Talukdārs* were in possession of large tracts, and were gradually set aside. Operations under Regulation VII of 1822 were only completed in about 600 villages, and the first regular settlement was made between 1834 and 1837. The next settlement was commenced before the Mutiny, and was completed in 1865; but the project for a permanent settlement entailed a complete revision. This showed that there had been an extraordinary rise in assets, which was partly due to survey errors, partly to concealments at the time of settlement, and partly to an increase in the rental value of land. The idea of permanently fixing the revenue was abandoned, and the demand originally proposed was sanctioned, with a few alterations, yielding 12·4 lakhs. The assets, of which the revenue formed half, were calculated by fixing standard rent rates for different classes of soil. These rates were partly derived from average rents and partly from valuations of produce. The latest revision of settlement was completed between 1886 and 1889, and was notorious for its results. The assessment was to be made on the actual rental assets; but the records were found to be unreliable on account of the dishonesty of many landlords, who had deliberately falsified the *patwāris'* papers, thrown land out of cultivation, and stopped irrigation. The tenants, who had been treated harshly and not allowed to acquire occupancy rights, themselves came forward to expose the fraud. Large numbers of rent-rolls were entirely rejected, and the villages they related to were valued at circle rates. The circle rates were obtained by an analysis of rents believed to be genuine. While the settlement of most of the District was confirmed for 30 years, a number of villages were settled for shorter terms to enable the settlement to be made on the basis of a fair area of cultivation. The total demand was fixed at 19·8 lakhs, which has risen to 20 lakhs. The incidence per acre is R. 1-15-0, varying in different parts of the District

from R. 1-2-0 to Rs. 2-9-0. Collections on account of land revenue and total revenue have been in thousands of rupees :—

	1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	12,31,	18,40,	19,81,	19,85,
Total revenue	13,81,	24,66,	27,99,	28,02,

Local
self-gov-
ernment.

There are 4 municipalities, BULANDSHAHR, ANUPSHAHR, SIKANDARABAD, and KHURJA, and 19 towns administered under Act XX of 1856. Outside these, local affairs are managed by the District board. In 1903-04 the income of the latter was 1-9 lakhs, chiefly derived from local rates as usual. The expenditure was 2 lakhs, of which Rs. 96,000 were spent on roads and buildings.

Police and
Jails.

In 1903 the District Superintendent of Police was assisted by 4 inspectors. The force numbered 106 officers and 355 constables, besides 369 municipal and town police, and 1,979 village and road police. The District jail contained an average population of 232 in the same year.

Educa-
tion.

The District is backward in literacy and only 2·5 per cent. (4·5 males and 3 females) of the population could read and write in 1901. In 1881 there were 130 public schools with 4,486 scholars, and the numbers rose in 1901 to 171 with 7,989 pupils. In 1903-04 there were 187 public schools with 10,801 pupils, of whom 57 were girls, and also 271 private schools with 4,157 pupils. Out of a total expenditure of Rs. 49,000, local and municipal funds supplied Rs. 38,000, and the income from fees was Rs. 11,000. Of the public schools two were managed by Government and 117 by the District and municipal boards.

Hospitals
and Dis-
pensaries.

The District has nine hospitals and dispensaries, with accommodation for 109 in-door patients. In 1903 the number of cases treated was 101,000, of which 2,300 were those of in-patients, while 8,400 operations were performed. The expenditure in the same year was Rs. 18,000, chiefly from local funds.

Vaccina-
tion.

In 1903-04, 39,000 persons were successfully vaccinated representing a proportion of 34 per 1,000 of population. Vaccination is only compulsory in the municipalities.

(F. S. Growse, *Bulandshahr*, Benares, 1884; T. Stoker, *Settlement Report*, 1891; H. R. Nevill, *District Gazetteer*, 1903.)

Anūpshahr Tahsīl.—Eastern *tahsīl* of Bulandshahr District, United Provinces, comprising the *parganas* of Anūpshahr, Ahār, and Dibai, and lying along the Ganges, between 28° 5' and 28° 37' N. and 77° 58' and 78° 28' E., with an area of 444 square miles. Population increased from 222,481 in 1891 to 278,152 in 1901. There are 378 villages and 4 towns, the largest of which are JAHANGIRABAD, population 11,572; DIBAI (10,579), and ANUPSHAHR, the *tahsīl* headquarters, (8,601). The demand for land revenue in 1903-04 was Rs. 4,99,000 and for cesses Rs. 80,000. The *tahsīl* is divided into two parts, from north to south, by the Chhoiyā river. The land to the east is naturally inferior to that on the west of the river, but has been immensely improved by irrigation from the Anūpshahr branch of the Upper Ganges Canal. The channel of the Chhoiyā was very badly defined, but has been straightened and deepened by the Irrigation department. Out of 339 square miles cultivated in 1903-04, the area irrigated amounted to 158, of which wells supplied more than half.

Bulandshahr Tahsīl.—Central *tahsīl* of Bulandshahr District, United Provinces, comprising the *parganas* of Baran, Agautā, Siyānā, and Shikārpur, and lying between 28° 14' and 28° 43' N. and 77° 43' and 78° 13' E., with an area of 477 square miles. Population increased from 281,928 in 1891 to 332,262 in 1901. There are 379 villages and 5 towns, the largest of which are BULANDSHAHR, the District and *tahsīl* headquarters, population 18,959, SHIKARPUR, (12,249), SIYANA, (7,615), GULAO THI, (7,208), and AURANGABAD, (5,916). The demand for land revenue in 1903-04 was Rs. 5,65,000 and for cesses Rs. 94,000. This is the finest *tahsīl* in the District and the density of population, 696 persons to the square mile, is considerably higher than the District average, 599. The East Kālī Nadi flows from north to south through the western portion of the *tahsīl*, and formerly caused much damage by flooding in wet years. It has been straightened and deepened, and is no longer used as a canal escape, with very beneficial results. The northern *pargana* of Agautā is the most fertile. There are marshy tracts in the north-east of the *tahsīl*, and sandy areas in the south-east. Irrigation is supplied by the Upper Ganges Canal east of the Kālī Nadi. Out of a total cultivated area of 376 square miles in 1903-04

191 square miles were irrigated. Well irrigation supplies two-thirds of this area, and is more important here than in the other *tahsils* of the District.

Sikandarābād Tahsīl.—North-western *tahsīl* of Bulandshahr District, United Provinces, comprising the *parganas* of Sikandarābād, Dādri, and Dankaur, and lying along the Jumna, between 28° 15' and 28° 39' N. and 77° 18' and 77° 50' E., with an area of 516 square miles. Population increased from 224,368 in 1891 to 260,849 in 1901. There are 404 villages and 7 towns, the largest of which are SIKANDARABAD, the *tahsīl* headquarters, population 18,290, and DANKAUR, (5,444). The demand for land revenue in 1903-04 was Rs. 4,32,000 and for cesses Rs. 74,000. The *tahsīl* is the poorest in the District and only supports 505 persons to the square mile, against an average of 599. It is crossed from north to south by two main lines of drainage—the Patwai and the Karon or Karwan. Both of these are naturally ill-defined, but their channels have been deepened and straightened. The area between the Patwai and Jumna is poor, and largely covered with tamarisk and grass jungle varied by patches of salt waste. In the north the HINDAN and Bhuriyā rivers increase the saturation, though they bring down fertile deposits of earth. The *tahsīl* is well supplied with irrigation by the Māt branch of the Upper Ganges Canal, which passes through the centre from north to south. In 1903-04, 150 square miles were irrigated out of a total cultivated area of 358 square miles. More than two-thirds of the irrigated area is supplied from the canal.

Khurja Tahsīl.—Southern *tahsīl* of Bulandshahr District, United Provinces, comprising the *parganas* of Jewar, Khurja, and Pahāsū, and lying between 28° 4' and 28° 20' N. and 77° 29' and 78° 12' E., with an area of 462 square miles. Population increased from 221,137 in 1891 to 266,838 in 1901. There are 348 villages and 7 towns, the largest of which are KHURJA, the *tahsīl* headquarters, population 29,277, the largest town in the District, JEWAR (7,718), PAHASU (5,603), CHHATARI (5,574), and RABUPURA (5,048). The demand for land revenue in 1903-04 was Rs. 5,05,000 and for cesses Rs. 82,000. The *tahsīl* is drained by the East Kālī Nadi, the Karon or Karwan, and the Patwai or Patwāhā Bahū, all which have been deepened and

straightened to improve the drainage. The Jumna flows along the western border. East of the Kālī Nadi and west of the Patwai are tracts of light sandy soil; but the central portion is highly fertile, and is well supplied by irrigation from the Upper Ganges Canal and the Māt branch of the same work. Cotton is more largely grown in this tract than in any other part of the District. Of 345 square miles cultivated in 1903-04, 152 were irrigated. Well irrigation supplies about one-third of the total, and is chiefly important in the area between the canals.

Ahār.—Ancient town in *pargana* of the same name, *tahsīl* Anūpshahr, District Bulandshahr, United Provinces, situated in 28° 28' N. and 78° 15' E., 21 miles east of Bulandshahr. Population 2,382 (1901). The town is said to derive its name from *ahī*, snake and *hār*, sacrifice, as tradition relates that Janamejayā performed his great snake sacrifice here. The capital of the Lunar race is also said to have been moved here after Hastināpur was washed away. Another legend states that this was the residence of Rukmini, wife of Krishna, and the temple from which she was carried off is still pointed out. The place is certainly of great antiquity, and several fragments of stone sculpture of an early date have been found. Under Akbar Ahār was chief town of a *mahāl* or *pargana*. The town lies on the high bank of the Ganges, and there are many temples. It also contains a hall for the meetings of the Aryā Samāj, which has over 100 followers here.

Anūpshahr Town.—Municipality and headquarters of *tahsīl* of the same name, District Bulandshahr, situated in 28° 21' N. and 78° 16' E., twenty-five miles east of Bulandshahr on a metalled road. Population (1901) 8,601. The town was founded in the reign of Jahāngīr by the Bargūjar Rājā Anūp Rāi, from whom it derives its name, and was of great importance in the 18th century as commanding an important crossing of the Ganges on the road from Delhi to Rohilkhand. In 1757 Ahmad Shāh Durrāni established cantonments here for a time and returned to them in 1759. It was from this place that the coalition was organized, which led to the overthrow of the Jāts and Rājputs and Marāthās at Pānīpat in 1761. In 1773 the combined forces of the Oudh Wazīr and the British made

Anūpshahr their *rendezvous* when opposing the Marāthā invasion of Rohilkhand; and from that date till 1806 Anūpshahr was garrisoned with British troops, afterwards removed to Meerut. During the Mutiny the Jāts successfully defended the crossing of the river by the rebels from Rohilkhand. The town stands on the high bank of the Ganges and is well drained. There is a fine bazar, and besides the *tahsīlī*, a dispensary is maintained. The Zenana Bible and Medical Mission and the Church Missionary Societies have branches here. Anūpshahr has been a municipality since 1866. In the ten years ending 1901 the average income and expenditure were Rs. 9,000. In 1903-04 the income was Rs. 11,000, chiefly derived from octroi, Rs. 6,000, and the expenditure Rs. 15,000. The town was formerly the northern limit of traffic on the Ganges, and a factory of the East India Company was maintained here for some time; but the construction of the Naraura weir in 1878 cut it off from the lower reaches of the river, and at present it is merely a depôt for timber and bamboos. The through trade across the river has also been diverted by railways, and at present sugar is the chief article of commerce. There is a small manufacture of cloth, blankets, and shoes for the local demand. The *tahsīlī* school contains 160 pupils, and there is also a Mission Anglo-Vernacular school.

Aurangābād Saiyid.—A small town in *tahsīl* and District Bulandshahr, United Provinces, situated in 28° 22' N. and 78° 5' E., 9 miles north-east of Bulandshahr. Population 5,916 (1901). The town was founded in 1704 by Saiyid Abdul Aẓīz, who undertook, with the permission of the emperor Aurangzeb, to eject the turbulent Jarolīyās of the neighbourhood. His descendants still own the town. The site is low and surrounded by water in the rains. Aurangābād is administered under Act XX of 1856, with an income of Rs. 2,000. Trade is entirely local. There is a primary school with 50 pupils.

Bulandshahr Town.—Municipality and headquarters of District and *tahsīl* of the same name, United Provinces, situated in 28° 15' N. and 77° 52' E., on the Grand trunk road, and 10 miles east of the Chola station on the East Indian Railway. Population (1901) 18,959, of whom 9,139 are Hindus and 9,071 Musalmāns. The old name of the town was Baran, and it

received the nickname Unchānagar or Bulandshahr (high town) from its elevated position on a bank near the Kālī Nadi. It is a place of considerable antiquity, and is said to have been founded by a Tomar chief of AHAR named Parmāl, or according to another account by a man named Ahibaran, from whom its name was derived. Buddhist remains of the 5th to 7th centuries have been found here, besides coins of much older date. In the 11th century the town was the headquarters of Har Dat, a Dor chieftain who ruled in this part of the Doāb, with territory extending as far as Hāpur and Meerut. In 1018 Mahmūd of Ghazni crossed the Jumna and reached Baran. In the words of the Persian historian, Har Dat "reflected that his safety would be best secured by conforming to the religion of Islām, since God's sword was drawn from the scabbard, and the whip of punishment was uplifted. He came forth, therefore, with 10,000 men who all proclaimed their anxiety for conversion and their rejection of idols." The town was restored to Har Dat; but from a copperplate inscription the Dors appear to have been superseded for a time. They were restored and Chandra Sen, the last Hindu ruler, died while gallantly defending his fort against Kutab-ud-dīn, the general of Muhammad Ghorī, in 1193. The town is chiefly famous in later times as having been the birthplace of the great historian, Zīā-ud-dīn Baranī, who flourished in the first half of the 14th century. There are a few tombs and mosques of the Muhammadan period, but none of importance. At the commencement of British rule Bulandshahr was a small town. A few fine houses stood on the elevation now known as the Bālāe Kot, and Chamārs and Lodhas lived in huts at the base. The establishment of the District headquarters here caused a rapid growth, and the town has been much improved by the energy and taste of its inhabitants encouraged by several Collectors, especially the late Mr. F. S. Growse. The Chauk or central market has been provided with a brick terrace and is adorned with carved stone, while the houses and shops surrounding it are elegant specimens of domestic architecture. The rich landlords of the District have also erected several fine houses and gateways, and a town hall, all of which are remarkable for the excellence of the stone work which they contain. Close to the courts is a handsome building

called the Lowe Memorial, in memory of a former Collector, which is used as a shelter for people attending the courts. A fine bathing *ghāt* has been made on the banks of the river at the eastern entrance of the town. A dispensary and a female hospital were built in 1895. Besides the ordinary District staff, an Executive Engineer of the Ganges Canal has his headquarters here. There are also stations of the American Methodist, Church Missionary Society, and Zenana Bible and Medical Missions.

Bulandshahr has been a municipality since 1865. In ten years ending 1901 the average income and expenditure were Rs. 18,000. In 1903-04 the income was Rs. 21,000, chiefly derived from octroi, Rs. 18,000, and the expenditure Rs. 24,000. Wood-carving of some artistic merit is turned out here. The distance from the railway has hitherto prevented the growth of trade, which is of a local nature. A line is, however, now under construction. A high school contains more than 200 pupils and a *tahsīlī* school 230, while 4 primary schools have 220 more.

Chhatāri.—A small town in *tahsīl* Khurja, District Bulandshahr, United Provinces, situated in 26° 6' N. and 78° 9' E., 30 miles south of Bulandshahr. Population 5,574 (1901). The town takes its name from the Chhatardhārī clan of Mewātīs who founded it. It belongs to the estate of the same name founded by Mahmūd Alī Khān, a brother of Murād Alī Khān of PAHASU. The estate is at present (1904) under the Court of Wards, as the owner, Ahmad Saiyid Khān, is a minor. Chhatāri is administered under Act XX of 1856, the annual income being Rs. 800. There is a primary school with about 120 pupils.

Dankaur.—An old town in *tahsīl* Sikandarābād, District Bulandshahr, United Provinces, situated in 28° 21' N. and 77° 33' E., 20 miles west of Bulandshahr. Population 5,444 (1901). The town is said to have been founded by Drona, the hero of the Mahābhārata, who taught the Pāndavas the use of arms. A masonry tank and ancient temple are still known as Dronācharj. The town lies on the edge of the high bank above the Jumna, and the upper portion is gradually being deserted for the lower, on the ground that it is unlucky.

Dankaur is administered under Act XX of 1856 with an income of about Rs. 1,300. It has a thriving trade in *ghī*, sugar, and grain. A primary school is attended by 80 pupils.

Dibai.—Flourishing town in *tahsīl* Anūpshahr, District Bulandshahr, United Provinces, situated in 28° 12' N. and 78° 16' E., close to the metalled road from Aligarh to Morād-ābād and a branch of the Oudh and Rohilkhand Railway. Population (1901) 10,579, which is increasing rapidly. The town is said to have been called Dhundhgarh in the 11th century, when it belonged to Dhākrā Rājputs, who were expelled by Saiyid Sālār Masūd. A new town was built, called Dhundai, and later Dibai. In the time of Akbar it was the headquarters of a *pargana* in the *sarkār* of Koil. The bazar is composed of brick-built houses, and the town is fairly well drained by the Chhoiyā river, which flows round three sides. Dibai is administered under Act XX of 1856, with an annual income and expenditure of about Rs. 5,000. It is a very prosperous town with 3 cotton gins, a cotton press, and an oil press, employing nearly 500 persons daily. There are large exports of coarse cloth, cotton, *ghī*, and grain. The town contains a flourishing anglo-vernacular school with 75 pupils, partly supported by market fees and partly by private subscriptions, and a middle school with 150.

Gulaothī.—Old town in *tahsīl* and District Bulandshahr, United Provinces, situated in 28° 35' N. and 77° 48' E., 12 miles north of Bulandshahr on the Meerut road. Population 7,208 (1901). The town is said to have been founded by Mewātīs or by Gahlot Rājputs. It is chiefly inhabited by Saiyids and Baniās. A prominent Saiyid, named Mihrbān Ali, who died a few years ago, did much to improve the town and its approaches. He built several houses, metalled the road to the Kālī Nadi, and built a bridge across it at a cost of Rs. 30,000, and also constructed a large mosque and established a school for teaching Arabic and Persian. The American Methodist Mission has a branch here. Gulaothī is administered under Act XX of 1856, with an annual income of Rs. 1,800. It has a considerable local trade and is thriving. The middle school contains about 200 pupils.

Jahāngirābād.—Prosperous town in *tahsīl* Anūpshahr, District Bulandshahr, United Provinces, lying in 28° 10' N.

and $77^{\circ} 42'$ E., 15 miles by metalled road from Bulandshahr. Population (1901) 11,572. The town was built by Anūp Rāi, founder of ANUPSHAHR, who named it after the emperor Jahāngīr. The place stands low and was formerly very unhealthy owing to the stagnant water in the neighbourhood and a ditch round the town; but this has now been drained. Act XX of 1856 is in force, and the annual income is about Rs. 3,300. There is an important market, and Jahāngīrābād is the centre of a flourishing grain trade. The principal manufacture is calico printing, excellent counterpanes, curtains, and cloths being turned out. The middle school is attended by over 250 pupils, 40 of whom reside in a boarding-house, and there is a small aided primary school with 38 scholars.

Jewar.—Town in *tahsīl* Khurja, District Bulandshahr, United Provinces, situated in $28^{\circ} 7'$ N. and $77^{\circ} 34'$ E., 20 miles west of KHURJA. Population (1901) 7,718. In the 11th century Jādon Rājputs, invited from Bharatpur by the Brahmans of Jewar, settled in the town and expelled the Meos. The well-known Begam Sumrū held Jewar till her death in 1836, when it lapsed to Government. The town lies among the ravines and broken ground of the edge of the high land above the Jumna and is well drained. The market was rebuilt in 1881 and is now lined with good brick-built shops. Jewar is administered under Act XX of 1856 with an income of about Rs. 2,000. There is a small manufacture of cotton rugs and carpets, and a weekly market is held. The town contains a prosperous agricultural bank, a middle school with 120 pupils, and a small primary school for girls, besides a branch of the American Methodist Mission.

Khurja Town.—Municipality and headquarters town of *tahsīl* of the same name, District Bulandshahr, United Provinces, situated in $28^{\circ} 15'$ N. and $77^{\circ} 51'$ E., near the Grand trunk road, and 4 miles from Khurja station on the East Indian Railway. Population 29,277 (1901), of whom 15,878 are Hindus and 12,923 Musalmāns. The town is said to derive its name from *khārīja* (revenue-free), as it was built by the Bhāle Sultān Rājputs on a revenue-free grant made by Firoz Shāh Tughlak. The descendants of the original grantees retained possession of their holdings till they were resumed partly by Sūraj Mal, Rājā of Bharatpur,

in 1740, and partly by Daulat Rao Sindhia towards the close of the 18th century. There is only one ancient building, the tomb of Makhdūm-Sāhib, near the old Grand trunk road, which is about 400 years old. The chief public buildings are the *tahsīlī*, dispensary, and town hall. The principal inhabitants of the town are the Kheshgī Pathāns and Churūwāl Baniās; the latter, who are Jain by religion, are an enterprising and a wealthy class, carrying on banking all over India and taking a leading share in the trade of the place. Thirty years ago they built a magnificent domed temple which cost more than a lakh, and is adorned with a profusion of stone carving of fine execution. The interior is a blaze of gold and colour, the vault of the dome being painted and decorated in the most florid style of indigenous decorative art. The market-place, bazar, and *dharmshāla* are all adorned by handsome gateways of carved stone, and owe much to the munificence of the Jain traders. There are branches of the American Methodist and Zenana Bible and Medical Missions here.

Khurja has been a municipality since 1866. The average receipts and expenditure in 10 years ending 1901 were Rs. 27,500. In 1903-04 the income was Rs. 38,000, chiefly derived from octroi, Rs. 28,000. The expenditure was Rs. 42,000. The town is the chief commercial centre of the District and contains 7 cotton gins and presses, which employed 444 hands daily in 1903. Cotton-ginning by hand is important, and there is a very large export of grain, besides a smaller trade in indigo, sugar, and *ghī*. The pottery of Khurja resembles that made at MULTAN and in the RAMPUR State and has some reputation. English cloth, metals, and brass utensils are the chief articles imported. There are 8 schools with about 600 pupils.

Pahāsū.—Town in *tahsīl* Khurja, District Bulandshahr, United Provinces, situated in 28° 10' N. and 78° 5' E., 24 miles south of Bulandshahr. Population 5,603 (1901). Partāb Singh, one of the first Bargūjar immigrants, made it his headquarters. Pahāsū was the chief town in a *mahāl* or *pargana* under Akbar, and in the 18th century was conferred with a *jāgīr* of 54 villages by Shāh Alam (II) on the Begam Sumrū for the support of her troops. After her death in 1836, it was held for a time by Government and then granted in 1851 to Murād

Ali Khān, a descendant of Partāb Singh. His son, Nawāb Faiz Ali Khān, K.C.S.I., behaved with conspicuous loyalty during the Mutiny, and was commander-in-chief and prime minister of Jaipur State. Since his death in 1894, his son, Nawāb Faiyāz Ali Khān, C.S.I., has served as a member of the Imperial and Provincial Legislative Councils, and is now a minister of State in Jaipur. The town is administered under Act XX of 1856 with an income of Rs. 900. The Nawāb maintains a dispensary and an anglo-vernacular school, and there is a primary school with 95 pupils.

Rabūpura.—A small town in *tahsīl* Khurja, District Bulandshāhr, United Provinces, situated in $28^{\circ} 15' N.$ and $77^{\circ} 37' E.$, 19 miles west of Bulandshahr. Population 5,048 (1901). The place was founded by a Mewātī named Rabū in the 11th century. The Mewātīs were ousted by the Jaiswār Rājputs in the time of Prithwī Rāj, late in the 12th century. From the days of Shāh Alam (II) up to 1857, Rabūpura was the centre of an estate comprising 24 villages, which was confiscated after the Mutiny for the rebellion of the proprietors. The town contains a good brick market, and half the houses and shops are also of brick. The American Methodist Mission has a branch here with a small church and dispensary. Rabūpura is administered under Act XX of 1856, with an income and expenditure of Rs. 1,300. There is a considerable trade in cattle. The primary school contains 60 pupils.

Shikārpur.—Town in *tahsīl* and District Bulandshāhr, United Provinces, situated in $28^{\circ} 17' N.$ and $78^{\circ} 1' E.$, 13 miles south of Bulandshahr. Population (1901) 12,249. The present town owes its existence to Sikandar Lodi, who built a hunting-lodge here at the end of the 15th century, near the site of an older town now represented by a mound called the Talpat Nagari or Anyai Khera. North of the site is a remarkable building of red sandstone called the Bāra Khamba, or 12 pillars, which formed an unfinished tomb begun by Saiyid Fazl-ullah, son-in-law of the emperor Farrukh Siyar, about 1718. The town contains a fine walled *sarai* built in the 17th century, and many substantial brick houses and a few handsome mosques. The American Methodists have a branch mission here. The town is administered under Act XX of 1856, with an income of about Rs. 4,500.

The chief manufactures are cloth and shoes, and excellent wood-carving is turned out on a small scale. The schools include a middle school with 190 pupils, and an aided primary school with 30.

Sikandarābād Town.—Municipality and headquarters of *tahsīl* of same name, District Bulandshahr, United Provinces, situated in 28° 28' N. and 77° 42' E., on the Grand trunk road, 4 miles from the Sikandarābād station on the East Indian Railway. Population (1901) 18,290, of whom 10,599 are Hindus and 6,814 Musalmāns. The town was built by Sikandar Lodī in 1498, and was the headquarters of a *pargana* or *mahāl* under Akbar. In the 18th century it was held for a time by Najib-ud-daula. Saādat Khān, Nawāb of Oudh, attacked and defeated a Marāthā force here in 1736. The Jāt army of Bharatpur encamped at Sikandarābād in 1763, but fled across the Jumna on the death of Sūraj Mal and defeat of Jawāhir Singh. Under Marāthā rule the town was the headquarters of a brigade under Perron, and after the fall of Aligarh, Colonel James Skinner held this place. During the Mutiny of 1857, the neighbouring Gūjars, Rājputs, and Muhammadans attacked and plundered Sikandarābād; but Colonel Greathed's column relieved the town on September 27th, 1857. There are several tombs and mosques of some antiquity. Besides the *tahsīlī* and police-station there is a dispensary, and the American Methodist Church Missionary Society and Zenana Bible and Medical Missions have branches here. Sikandarābād has been a municipality since 1872. In ten years ending 1901 the average income and expenditure were Rs. 15,000. In 1903-04 the income was Rs. 23,000, chiefly derived from octroi, Rs. 17,000, and the expenditure was Rs. 21,000. There is not much trade, but fine cloth or muslin is manufactured and exported to Delhi, and a cotton gin has been recently opened, which employed 105 hands in 1903. The town contains a flourishing anglo-vernacular school with more than 200 pupils, a *tahsīlī* school with 120, and 5 primary schools with 240.

Siyānā.—Town in *tahsīl* and District Bulandshahr, United Provinces, situated in 28° 37' N. and 78° 4' E., 19 miles north-east of Bulandshahr. It is being connected by metalled road with Bulandshahr and Garhmuktesar. Population (1901) 7,615.

The name is said to be a corruption of Sainban or "the forest of rest," because Balarāma, brother of Krishna, on his way from Muttra to Hastināpur, slept here one night, and was hospitably entertained by *fakīrs*, who had excavated a tank in the centre of a vast forest. The town gave its name to a *mahāl* or *pargana* recorded in the Ain-i-Akbarī. After the British conquest it was the headquarters of a *tahsildār* and Munsiff up to 1844. It is now of small importance, but has been improved lately, and the mud huts are being replaced by brick houses. Act XX of 1856 is in force, the annual income being about Rs. 1,800. There was formerly some trade in safflower, but it is declining. Indigo is still made in a small factory. A middle school with a boarding-house is attended by about 160 pupils.

Bounda-
ries, con-
figura-
tion, and
river
system.

Aligarh District.—The most southern District in the Meerut Division, United Provinces, lying between $27^{\circ} 29'$ and $28^{\circ} 11'$ N. and $77^{\circ} 29'$ and $78^{\circ} 38'$ E., with an area of 1,946 square miles. It is bounded on the north by Bulandshahr District; on the east and south by Etah; and on the west and south by Muttra. The Jumna separates the north-west corner from the Punjab District of Gurgaon, and the Ganges the north-east corner from Budaun. Bordering on the great rivers lie stretches of low land called *khādar*. The Ganges *khādar* is fertile and produces sugarcane, while the Jumna *khādar* is composed of hard unproductive clay, chiefly covered with coarse jungle grass and tamarisk. The rest of the District forms a fertile upland tract traversed by three streams. The most important is the EAST KALI NADI, which winds across the eastern portion. Between the Kālī Nadi and the Ganges lies the Nīm Nadi, with an affluent known as the Chhoiyā. In the west of the District the Karon or Karwan flows through a wide valley. The centre of the District is a shallow depression, the drainage of which gradually collects into two streams named the Sengar and the Rind or Arind.

Botany.

The flora of Aligarh presents no peculiarities. At the commencement of British rule the surface of the country was covered with large tracts of jungle, chiefly of *dhāk* (*Butea frondosa*). The jungle was rapidly cut as cultivation extended and for many years was not replaced. Between 1870 and 1900, however, the area under groves doubled and is now about 18 square

miles. The principal trees are *babūl* (*Acacia arabica*), *nīm*, (*Melia azadirachta*), and mango. Better sorts of timber for building purposes have to be imported.

The District is composed of alluvium; but *kankar* or Geology. limestone is found in nodules and also consolidated in masses, from which it is quarried for building purposes. Large stretches of land are covered with saline efflorescences.

Wild pig are very common in the *khādar* and are also Fauna. found near the canal. Antelope and jackals are fairly common in most parts. In the cold weather snipe and many kinds of duck appear on the swamps. Fish are plentiful, but are not much eaten, and there are no regular fisheries in the District.

The climate of Aligarh is that of the Doāb plains generally. Climate The year is divided into—the rainy season from June till and tem-
October; the cool season from October till April; and the hot perature. season from April till June.

The average rainfall is about 26 inches, and there is little Rainfall. variation in the District; the north-east receives slightly more rain than the south-west. Variations from year to year are more considerable. In 1894-95 the average fall was 33 inches, while in 1896-97 it was only 19 inches.

The few facts in the early annals of the District which History. can now be recovered centre around the ancient city of Koil, of which the fort and station of Aligarh form a suburb. A popular legend informs us that Koil owes its origin to one Koshārab, a Kshattriya of the Lunar race, who called the city after his own name; and that its present designation was conferred upon it by Balarāma, who slew the great demon Kol, and subdued the neighbouring regions of the Doāb. Another tradition assigns a totally different origin to the name. The District was held by the Dor Rājputs before the first Muhammadan invasion, and continued in the hands of the Rājā of Baran until the close of the 12th century. In 1194 A.D. Kutab-ud-dīn marched from Delhi to Koil, on which occasion, as the Muhammadan historian informs us, "those who were wise and acute were converted to Islām, but those who stood by their ancient faith were slain with the sword." The city was thenceforward administered by Musalmān governors,

but the native Rājās retained much of their original power. The District suffered during the invasion of Tīmūr in the 14th century, and participated in the general misfortunes which marked the transitional period of the 15th. After the capture of Delhi by the Mughals, Bābar appointed his follower, Kachak Ali, governor of Koil (1526). Many mosques and other monuments still remain, attesting the power and piety of the Musalmān rulers during the palmy days of the Mughal dynasty. The period was marked, here as elsewhere, by frequent conversions to the dominant religion. But after the death of Aurangzeb, the District fell a prey to the contending hordes who ravaged the Doāb. The Marāthās were the first in the field, and they were closely followed by the Jāts. About the year 1757, Sūraj Mal, a Jāt leader, took possession of Koil, the central position of which, on the roads from Muttra and Agra to Delhi and Rohilkhand, made it a post of great military importance. The Jāts in turn were shortly afterwards ousted by the Afghāns (1759), and for the next twenty years the District became a battlefield for the two contending races. The various conquests and reconquests which it underwent had no permanent effects, until the occupation by Sindhia took place in 1784. The District remained in the hands of the Marāthās until 1803, with the exception of a few months, during which a Rohilla garrison was placed in the fort of Aligarh by Ghulām Kadir Khān. Aligarh became a fortress of great importance under its Marāthā master; and was the depôt where Sindhia drilled and organized his battalions in the European fashion, with the aid of de Boigne. When, in 1802, the triple alliance between Holkar, Sindhia, and the Rājā of Nāgpur was directed against the British, the Nizām and the Peshwā, Aligarh was under the command of Sindhia's famous leader, Perron, while the British frontier had already advanced to within 15 miles of Koil. Perron undertook the management of the campaign; but he was feebly seconded by the Marāthā chieftains, who waited, in the ordinary Indian fashion, until circumstances should decide which of the two parties it would prove most to their interest to espouse. In August, 1803, a British force under Lord Lake advanced upon Aligarh, and was met by Perron at the frontier. The

enemy did not wait after the first round of grape from the British artillery, and Perron fled precipitately from the field. Shortly after he surrendered himself to Lord Lake, leaving the fort of Aligarh still in the possession of the Marāthā troops, under the command of another European leader. On the 4th September the British moved forward to the assault; but they found the fortifications planned with the experience of French engineers, and desperately defended with true Marāthā obstinacy. It was only after a most intrepid attack and an equally vigorous resistance that the fortress, considered impregnable by the natives, was carried by the British assault; and with it fell the whole of the upper Doāb to the very foot of the Siwāliks. The organization of the conquered territory into British Districts was undertaken at once. After a short period, during which the *parganas* now composing the District of Aligarh were distributed between Fatehgarh and Etāwah, the nucleus of the present District was separated in 1804. Scarcely had it been formed when the war with Holkar broke out, and his emissaries stirred up the discontented revenue farmers who had made fortunes by unscrupulous oppression under the late Marāthā rule to rise in rebellion against the new Government. This insurrection was promptly suppressed (1805). A second revolt, however, occurred in the succeeding year; and its ringleaders were only driven out after a severe assault upon their fortress of Kamonā. Other disturbances with the revenue-farmers arose in 1816, and it became necessary to dismantle their forts. The peace of the District was not again interrupted until the outbreak of the Mutiny. News of the Meerut revolt reached Koil on the 12th May, 1857, and was here followed by the mutiny of the native troops quartered at Aligarh, and the rising of the rabble. The Europeans escaped with their lives, but the usual plunderings and burnings took place. Until the 2nd July, the factory of Mandrak was gallantly held by a small body of volunteers in the face of an overwhelming rabble; but it was then abandoned, and the District fell into the hands of the rebels. A native committee of safety was formed to preserve the city of Koil from plunder; but the Musalmān mob ousted them, and one Nasim-ullah took upon himself the task of government. His excesses alienated the Hindu population and made them more ready to side with the British on their return. The old Jāt

and Rājput feuds broke out meanwhile with their accustomed fury; and, indeed, the people indulged in far worse excesses towards one another than towards the Europeans. On the 24th August a small British force moved upon Koil, when the rebels were easily defeated, and abandoned the town. Various other bodies of insurgents afterwards passed through on several occasions, but the District remained substantially in our possession; and by the end of 1857 the rebels had been completely expelled from the Doāb. With that episode the history of Aligarh fortunately closes.

Archæology.

There are many ancient mounds in the District where carvings of the Buddhist and early Hindu periods have occasionally been exposed, but none of these has been explored. The principal Muhammadan buildings are at Aligarh and Jalāli.

The people.

The District contains 23 towns and 1,753 villages. During the last 30 years the population has been: 1872, 1,073,256; 1881, 1,021,187; 1891, 1,043,172; 1901, 1,200,822. In 1876-77 the District suffered from famine, and in 1879 from fever. Owing to the extension of canal irrigation it escaped in 1896-97. There are 6 *tahsils*, ATRAULI, ALIGARH, IGLAS, KHAIR, HATHRAS, and SIKANDRA RAO, with headquarters at places of the same names. The chief towns are the municipalities of Koil or ALIGARH, the headquarters of the District, HATHRAS, ATRAULI, and SIKANDRA RAO. The following table gives the principal statistics of population in 1901:—

<i>Tahsil.</i>	Area in square miles.	Number of—		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Atrauli ...	343	4	289	198,034	577	+ 17·1	3,396
Aligarh...	356	3	342	268,012	753	+ 14·3	11,523
Iglās ...	213	1	209	118,803	558	+ 9·7	2,589
Khair ...	407	3	272	178,867	439	+ 15·8	2,927
Hathras ...	290	5	393	225,574	778	+ 7·7	8,795
Sikandra Rao ...	337	7	248	211,532	628	+ 13·4	5,308
District Total ...	1,946	23	1,753	1,200,822	612	+ 15·1	34,538

Hindus include 1,033,806 or 86 per cent. of the total; Musalmāns 148,943 or 12·4 per cent.; Aryās 9,558; and Christians 5,055. The District is thickly inhabited and population increased at an unusual rate between 1891 and 1901. The language spoken by 99·9 per cent. of the people is Western Hindī, and the dialect used by villagers is Braj.

The most numerous castes amongst Hindus are the Chamārs (leather-workers and labourers; 223,000), Brāhmans, 131,000, Jāts, 108,000, Rājputs, 91,000, Baniās, 45,000, Lodhas (cultivators; 40,000), Gadariās (cultivators and shepherds; 36,000), Koris (weavers; 30,000), Kāchhīs (cultivators; 22,000), and Khatiks (poulterers and gardeners; 21,000). Jāts belong chiefly to the west of the United Provinces, and Kāchhīs and Lodhas to the centre. The Musalmāns are for the most part descended from converted Hindus. Shaikhs number 26,000, Pathāns, 20,000, Rājputs, 13,000, Saiyids, 6,000, and Mewātīs, 6,000. Agriculturists form 47 per cent. of the total population. Rājputs own 23 per cent. of the total area, Jāts 20 per cent., Brāhmans 14 per cent., and Baniās 13 per cent. Brāhmans, Rājputs, and Jāts hold the largest areas as cultivators. General labour supports 13 per cent. of the population, personal services 10 per cent., weaving 3 per cent., and grain-dealing 3 per cent.

Of the 4,900 native Christians, more than 4,700 belong to the Methodist Episcopal Church, which started work here in 1885 and has ten branches in the District. The Church Missionary Society has had a station at Aligarh since 1863, and also has a branch at Hāthras.

In the western *tahsils*, Khair and Iglās, there are distinct sandy ridges, and the eastern part of the District also contains light soil. There are other sandy tracts near the rivers. In the central depression the chief characteristic is the presence of extensive plains of barren land called *ūsar*. In many cases these are covered with the saline efflorescence called *reh*. There is a sharp distinction between the homelands and the outlying portion of each village, the former receiving most of the manure. The best lands are double-cropped, and sugarcane is little grown.

The tenures of the District are those commonly found, but a larger area than usual is held *zamīndāri*, which includes 2,199 *mahāls* out of 3,334. Of the remainder, 649 *mahāls* are *pattidāri*.

Castes
and occu-
pations.

Christian
missions.

General
agricul-
tural con-
ditions.

Chief
agricul-
tural sta-
tistics and
crops.

and 486 *bhaiyāchārā*. There are also a few *talukdāri* estates, the chief of which, MURSAN, is described separately. Settlement is invariably made in these with the subordinate proprietors or *biswādārs*, who pay into the treasury the amount due to the *talukdārs*. The principal agricultural statistics in square miles for 1903-04, according to the village papers, are given below :—

<i>Tahsīl.</i>	Total.	Cultivated.	Irrigated.	Culturable waste.
Atrauli	343	266	123	26
Aligarh	356	246	167	21
Iglās	213	187	78	9
Khair	407	292	119	56
Hāthras	290	239	113	11
Sikandra Rao	337	218	164	19
Total	1,946	1,448	764	142

The chief food crops with their area in 1903-04 are: wheat (336), barley (281), *jowār* (188), *gram* (203), maize (139), *bājra* (148), and *arhar* (78). The most important of the other crops are cotton (138) and indigo (30).

Improve-
ments in
agricul-
tural
practice.

Some experiments have been made in the reclamation of *ūsar* land, but only with partial success. The most important of these was the establishment of a dairy farm at Chherat near Aligarh. In some places plantation of *babūl* trees have been made in barren soil. The decline in the growth of indigo is not so marked as elsewhere. Satisfactory items are the increase in the area of wheat grown by itself for export and in the double-cropped area. The area under *gram* is decreasing. From 1891 to 1900 the advances under the Agriculturists' Loans Act amounted to Rs. 61,000, of which Rs. 14,000 were lent in 1896-97. In 1903-04 Rs. 1,700 were advanced. Slightly larger amounts have been taken under the Land Improvement Loans Act, which were Rs. 72,000 in the ten years ending 1900, and as much as Rs. 13,000 in 1903-04. A large agricultural show is held annually at Aligarh. Important drains have been made in several parts of the District, especially in the central depression; but in the south-west of the District the water level has sunk considerably.

Cattle,
horses,
and sheep.

There is no peculiar breed of cattle or sheep, and the best animals are imported from beyond the Jumna. Horse-breeding

has, however, become popular, and a number of stallions are maintained by Government. Since 1903 operations have been in charge of the Army Remount department.

The Upper Ganges Canal passes through the centre of the District. East of the Kālī Nadī, the Anūpshahr branch of the same work supplies part of the Atrauli *tahsīl* and west of the Karon the Māt branch serves Khair. The Lower Ganges Canal crosses the east of the District, but supplies no irrigation to it. The Iglās and Hāthras *tahsīls* are at present practically without canal irrigation, but two distributaries have been projected to water the tract east of the Karon. The total area irrigated from canals in 1903-04 was 229 square miles. Well irrigation is at present still more important and the area supplied in this way was 515 square miles. Other sources are unimportant. The Irrigation department maintains about 330 miles of drains.

The chief mineral product of the District is *kankar*, which is used for road-making and for building. In the Sikandra Rao *tahsīl* saltpetre and glass are manufactured from saline efflorescences.

The principal manufactures of the District are the weaving of cotton cloth and of cotton rugs and carpets, the latter being especially noted. There were 79 indigo factories, the largest number in any District in the Provinces, which employed about 4,500 hands in 1902. These were almost entirely owned by natives. Indigo cultivation has, however, been almost abandoned. Practically none has been sown and no factories were worked in 1904. The postal workshops supply the post-office department with numerous articles, and employ about 300 hands. There are three lockworks with 320 workmen. Although the area under cotton has decreased, there were more than 20 steam gins and presses with 1,781 hands in 1903, and one cotton spinning mill with 516. The District also contains an important dairy farm, and there is a small manufacture of dried meat for Burma. The most striking feature of the industries in Aligarh is the large extent to which they have been developed and are maintained by native capital and management.

Grain and cotton are the principal articles of export; but oilseeds, saltpetre, and country glass are also considerable items. Sugar, rice, piece-goods, spices, metals, and timber form

the chief imports. Hāthras is by far the most important centre of trade and ranks second to Cawnpore in the United Provinces. The trade and importance of Koil or Aligarh is, however, increasing, and Atrauli and Harduāganj are also thriving. The commerce of the District is largely with Cawnpore, Bombay, and Calcutta.

Railways
and roads.

Aligarh is well supplied with means of communications. The East Indian Railway passes through it from south to north, and a branch of the Oudh and Rohilkhand Railway from Morādābād and Bareilly meets it at Aligarh. The south of the District is crossed by the metre-gauge Cawnpore-Achhnerā section of the Rājputāna-Mālwā Railway, and Hāthras, which lies on this line, is also connected by a broad gauge line with the East Indian Railway.

There are 243 miles of metalled roads, all in charge of the Public Works department, though 125 miles are maintained at the cost of local funds. Besides these, 338 miles of unmetalled roads are also maintained by, and at the cost of, the District board. Every *tahsīlī* town is connected by metalled road with the District headquarters. The through lines which cross the District are the Grand trunk road, the Muttra-Kāsganj, and the Agra-Morādābād roads. About 90 miles of avenues are maintained.

Famines.

Aligarh suffered severely from famine before British rule commenced. In 1783-84 many villages were deserted, and the memory of this terrible famine long survived. Droughts periodically caused more or less severe scarcity in the early years of the 19th century, culminating in the great famine of 1837. By 1860-61 the canal had made its influence felt, and in 1868-69 distress was confined to the areas not protected, and grain was exported to the Punjab and Central Provinces. In 1877 there was considerable distress in the same areas; but in 1896-97 the District hardly suffered at all owing to recent extensions and improvements in the canal system. Private charity was sufficient to relieve the many immigrants from more distressed areas.

District
sub-divi-
sions and
staff.

The Collector is usually assisted by a member of the Indian Civil Service, and by 3 or 4 Deputy Collectors recruited in India. A *tahsildār* is stationed at the headquarters of each *tahsīl*. Besides the ordinary staff two Executive Engineers

of the Upper and Lower Ganges Canals are stationed in the District.

There are three Munsiffs, a Subordinate Judge, and an Additional Subordinate Judge. The District and Sessions Judge is assisted by an Additional Judge, and both of these have civil and criminal jurisdiction over the whole of the Bulandshahr (excluding *tahsīl* Sikandarābād), Aligarh, and Etah Districts. Organized dacoities are fairly common, especially in the south of the District. Cattle-lifting is still prevalent in the tract bordering on the Jumna, where many small Gūjar and Jāt landholders, in co-operation with receivers in the Punjab, levy blackmail from the owners of lost cattle, who prefer to recover their property in this way rather than to call in the police. Hābūrās and Aheriās are small criminal tribes, who are responsible for many thefts and burglaries; but they differ widely, the former being mostly gipsies and the latter resident criminals. Infanticide was formerly prevalent, but no villages are now proclaimed.

A District of Aligarh was first formed in 1804, but several additions and alterations were made both before and after 1824, when the District approximately took its present shape. early settlements were for the usual short periods, and were chiefly remarkable for the length of time during which the revenue was farmed, instead of being settled direct with the village *zamīndārs*. In 1833 the first regular settlement was commenced and the circumstances of the *talukas* were carefully examined. Where village proprietors did not exist the *talukdār* received full proprietary rights: where the original proprietors survived, settlement was made with them, and the amount payable to the *talukdār* through Government was fixed. The settlement was based on assumed rent rates and amounted to 18·4 lakhs on the present area. The revenue at the next revision between 1867 and 1874 was also based on soil rates; but these were tested by the recorded rates, though the latter were generally rejected as inadequate, and the standard rates were modified according to the circumstances of individual villages. The demand was fixed at 21·5 lakhs. Another revision was made between 1899 and 1903, when the rent-rolls were found to be generally accurate, but the competition rents were reduced in calculating the revenue, and the occupancy rents were enhanced.

The new revenue amounts to 24·5 lakhs, and the incidence to Rs. 1·9 per acre, varying from R. 1·6 to Rs. 2·4 in different *tahsils*. The total receipts, in thousands of rupees, on account of revenue from land and from all sources have been—

				1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	...		21,34,	20,88,	21,87,	24,16,
Total revenue	...	...		25,07,	29,28,	32,54,	34,91,

Local self-government.

There are four municipalities and 19 towns administered under Act XX of 1856. Outside these, local affairs are managed by the District board, which has an income of about 2 lakhs, chiefly derived from local rates. The expenditure in 1903-04 was 2 lakhs, of which Rs. 73,000 were spent on roads and buildings.

Police and Jails.

The District Superintendent of Police is in charge of a force of four inspectors, 96 subordinate officers, and 442 constables, besides 374 municipal and town police, and 2,033 rural and road police. The District jail contained a daily average of 350 prisoners in 1903.

Education.

In 1901 the number of persons able to read and write was 2·9 per cent. (5·2 males and ·2 females) of the total, and Musalmāns showed a slightly higher percentage than Hindus. While the number of public institutions fell from 221 in 1880-81 to 204 in 1900-01, the scholars increased from 6,722 to 10,060. In 1903-04 there were 226 with 11,760 pupils, including 563 girls, besides 340 private schools with 5,592 scholars, of whom 27 were girls. The most important institution is the Muhammadan Anglo-Oriental College at ALIGARH. Of the public institutions, four are managed by Government and 160 by the District and municipal boards, the rest being chiefly aided schools. In 1903-04 the total expenditure on education was 1·8 lakhs, of which Rs. 52,000 were met from fees, Rs. 45,000 from local and municipal funds, and Rs. 25,000 from Government.

Hospitals and Dispensaries.

There are 15 hospitals and dispensaries with accommodation for 185 in-patients. In 1903 the number of patients treated was 126,000, of whom 2,591 were in-patients, while 5,963 operations were performed. The total expenditure was Rs. 23,000, chiefly met from local funds.

About 42,000 persons were successfully vaccinated in 1903-04, representing 35 per 1,000 of population. Vaccination is only compulsory in the municipalities.—(*District Gazetteer*, 1875 [*under revision*]; W. J. D. Burkitt, *Settlement Report*, 1903.)

Atrauli Tahsil.—North-eastern *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Atrauli and Gangirī, and lying between 27° 48' and 28° 9' N. and 78° 12' and 78° 38' E., with an area of 343 square miles. Population increased from 164,073 in 1891 to 198,034 in 1901. There are 289 villages and 4 towns, the largest of which is ATRAULI, the *tahsīl* headquarters, population 16,561. The demand for land revenue in 1903-04 was Rs. 3,77,000 and for cesses Rs. 61,000. The Ganges forms part of the northern boundary, and the Kālī Nadi skirts the *tahsīl* on the west and south. The Nim Nadi and its tributary, the Chhoiyā, flow through the middle of the *tahsīl*. Between the Ganges and Nim Nadi the soil is naturally sandy except in the Ganges *khādar*, which is a rich alluvial deposit; but irrigation is provided by the Anūpshahr branch of the Upper Ganges Canal. The rest of the *tahsīl* is a good loam tract, except where patches of *ūsar* land are found. In 1903-04, out of a cultivated area of 266 square miles, 123 were irrigated.

Aligarh Tahsil (or Koil).—Central northern *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Koil, Morthal and Barauli, and lying between 27° 46' and 28° 8' N. and 77° 55' and 78° 17' E., with an area of 356 square miles. Population increased from 229,767 in 1891 to 268,012 in 1901. There are 342 villages and 3 towns, ALIGARH (or Koil), the District and *tahsīl* headquarters, population 70,434, JALALI (8,830), and HARDUAGANJ (6,619). The demand for land revenue in 1903-04 was Rs. 4,57,000 and for cesses Rs. 76,000. On the east the *tahsīl* is bounded by the Kālī Nadi. In the centre lies a depression which has been much improved by two main drainage cuts, and the *tahsīl* is now one of the most prosperous in the District; ample irrigation is provided by the Upper Ganges Canal, and 167 square miles were irrigated in 1903-04 out of 246 square miles cultivated.

Iglās.—Central western *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Hasangarh and Gorai,

and lying between $27^{\circ} 35'$ and $27^{\circ} 55'$ N. and $77^{\circ} 47'$ and $78^{\circ} 3'$ E., with an area of 213 square miles. Population increased from 107,227 in 1891 to 118,803 in 1901. There are 209 villages and one town, Beswān, with a population of 2,871. The demand for land revenue in 1903-04 was Rs. 2,96,000 and for cesses Rs. 49,000. The *tahsīl* is intersected by high ridges of sandy soil with good loam between. There is no canal irrigation, and well irrigation has become more difficult of late years owing to the fall of the spring level. In 1903-04 only 78 square miles were irrigated out of 187 cultivated.

Khair.—North-western *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Khair, Chandaus, and Tappal, and lying between $27^{\circ} 51'$ and $28^{\circ} 11'$ N. and $77^{\circ} 29'$ and $78^{\circ} 1'$ E., with an area of 407 square miles. Population increased from 150,656 in 1891 to 178,867 in 1901. There are 272 villages and 3 towns, none of which has a population of 5,000; Khair, the *tahsīl* headquarters, has a population of 4,537. The demand for land revenue in 1903-04 was Rs. 4,11,000 and for cesses Rs. 66,000. The *tahsīl* is bounded on the west by the Jumna, and has a considerable area of *khādar* land in which nothing grows but coarse grass and tamarisk, the haunt of innumerable droves of wild pig. Large herds of cattle are grazed by the Gūjar inhabitants of this tract, who are inveterate cattle thieves. The density of population, 439 to the square mile, is much lower than the District average of 612. The Māt branch of the Upper Ganges Canal provides irrigation, and in 1903-04 the area irrigated was 119 square miles out of 292 cultivated.

Hāthras Tahsīl.—South-western *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Hāthras and Mursān, and lying between $27^{\circ} 29'$ and $27^{\circ} 47'$ N. and $77^{\circ} 52'$ and $78^{\circ} 17'$ E., with an area of 290 square miles. Population increased from 208,264 in 1891 to 225,574 in 1901. There are 393 villages and 5 towns, the largest of which is HATHRAS, the *tahsīl* headquarters, population 42,578. The demand for land revenue in 1903-04 was Rs. 4,44,000 and for cesses Rs. 74,000. The density of population is 778 to the square mile, while the District average is 612. The eastern portion of the *tahsīl* lies low, and the drainage is naturally bad, but it has been much improved by artificial channels. There is no canal irrigation

MURSĀN.

and well irrigation has recently become more difficult owing to a fall in the spring level; but an extension of the Māt branch of the Upper Ganges Canal is contemplated. In 1903-04 the area cultivated was 239 square miles, and the area irrigated was 113.

Sikandra Rao Tahsil.—South-eastern *tahsīl* of Aligarh District, United Provinces, comprising the *parganas* of Sikandra and Akrābād, and lying between $27^{\circ} 32'$ and $27^{\circ} 53'$ N. and $78^{\circ} 10'$ and $78^{\circ} 32'$ E., with an area of 337 square miles. Population increased from 183,185 in 1891 to 211,532 in 1901. There are 248 villages and 7 towns, the largest of which are SIKANDRA RAO, the *tahsīl* headquarters, population 11,372, and PILKHANA (5,109). The demand for land revenue in 1903-04 was Rs. 4,32,000 and for cesses Rs. 69,000. On the north-east the Kālī Nadi forms the boundary, and in the south of the *tahsīl* one or two small streams rise. Irrigation is supplied by the Etāwah branch of the Upper Ganges Canal, and the *tahsīl* is one of the most prosperous in the District, in spite of the presence of large waste areas covered with saline efflorescences. In 1903-04 the area irrigated was 164 square miles, out of a total cultivation of 218 square miles.

Mursān.—An estate situated in the Aligarh, Muttra, and Etah Districts, United Provinces, with an area of 60 square miles. The demand for land revenue in 1903-04 was a lakh and for cesses Rs. 16,000, while the rent-roll was 2·1 lakhs. This is the most important Jāt estate in the United Provinces. In the 16th or 17th century, a Jāt, named Makan, came from Rājputāna to the neighbourhood of Mursān town, and he and his descendants acquired considerable estates, partly by clearing waste land. The result was the formation of a number of *talukas* or baronies, linked together by the kinship of the owners. Nand Rām, head of the clan, submitted to Aurangzeb, when the latter had firmly established himself, and was appointed an administrative official. He died in 1695, leaving 14 sons, the eldest of whom was called Zulkaran, and predeceased his father. The Jāt possessions were divided among the other children of Nand Rām; but Zulkaran's son, Khushāl Singh, who only obtained two villages, attracted the notice of Saādāt Khān, Nawāb of Oudh, and obtained the farm of other property. In 1749 he was succeeded by Puhup Singh, who largely increased

the estates he had inherited, by obtaining from the *āmils* leases of villages which had fallen out of cultivation, or in which arrears of revenue were due. He also acquired a considerable share in the *talukas* left by Nand Rām, though dispossessed for a time by Sūraj Mal, Rājā of Bharatpur, and was the first of the family to assume the title of Rājā. In 1803 Bhagwant Singh, son of Puhup Singh, was allowed to engage for payment of revenue of all the estates held by him, without any detailed inquiry into their internal circumstances, and retained some independent judicial authority. He also received a *jāgīr* for services rendered in Lord Lake's campaign. A few years later both Bhagwant Singh and Dayā Rām, *talukdār* of Hāthras, another descendant of Nand Rām, came into conflict with the authorities, for persistent default in the payment of revenue and defiance of the courts, and in 1817 troops were sent against them. Dayā Rām at first resisted, and on the fall of Hāthras his estates were confiscated; but Bhagwant Singh surrendered. He was treated leniently, and his possessions were not escheated, though his special police jurisdiction was cancelled. On his death in 1823 the process of direct engagement with the village proprietors was commenced, and his son, Tikam Singh, lost considerably. The separation of subordinate rights was completed in the first regular settlement, and was resisted in the courts by the Rājā, but without success. Owing to his loyalty in the Mutiny, Rājā Tikam Singh received an abatement of Rs. 6,000 a year in his revenue, and was also created C.S.I. The present owner of the estate is Rājā Dat Prasād Singh, who succeeded a grandson of Tikam Singh in 1902.

The principal place in the estate is Mursān, a small town on the Cawnpore-Achhnerā Railway, with a population of 4,395, which is administered under Act XX of 1856. A primary school here contains 120 pupils.

Aligarh City.—Municipality and headquarters city in the District and *tahsīl* of the same name, United Provinces, situated in 27° 53' N. and 78° 4' E. It lies on the Grand trunk road at the junction of a branch of the Oudh and Rohilkhand with the East Indian Railway, 876 miles by rail from Calcutta and 904 miles from Bombay. The native city lies west of the railway and is generally called Koil or Kol, Aligarh being

strictly the name of a fort beyond the civil station, on the east of the railway. Population has increased, especially in the last ten years: 1872, 58,539; 1881, 62,443; 1891, 61,485; 1901, 70,434. Hindus number 41,076 and Musalmāns 27,518.

Various traditions explain the name of the city as derived from one Koshārab, a Kshattriya, or from a demon named Kol, who was slain by Balarāma, brother of Krishna. Buddhist and ancient Hindu remains prove the antiquity of the place; but nothing is known of its history till the 12th century, when it was held by the Dor Rājputs, who were defeated by Kutab-ud-dīn, after a desperate struggle, in 1194. Koil then became the seat of a Muhammadan governor, and is recorded in the *Ain-i-Akbarī* as headquarters of a *sarkār* in the *sūbah* of Agra. The later history of the place has been given under ALIGARH DISTRICT. The fort lies three miles from Koil, and is surrounded by marshy land and pieces of water which add to its strength, especially in the rains. It was called Muhammadgarh in the 16th century after Muhammad, the ruler of Koil under the Lodīs. About 1717 it was called Sābitgarh after Sābit Khān, another governor, and about 1757 the Jāts changed the name to Rāmgarh. The name Aligarh was given by Najaf Khān, who took the place. It was strengthened by its successive holders, and de Boigne and Perron, the French generals in Marāthā employ, took great pains to render it impregnable. In 1803 Lord Lake captured the fort by storm and said in his despatch: "from the extraordinary strength of the place, in my opinion, British valour never shone more conspicuous." The native troops at Aligarh joined the Mutiny of 1857, and the town was successively plundered by the Mewātīs of the neighbouring villages, by the passing rebel soldiery, by Nasīm-ullah during his eleven days' rule, and by the British troops.

The town of Koil has a handsome appearance, the centre being occupied by the lofty site of the old Dor fortress, now crowned by a mosque built early in the 18th century, which was repaired during 1898-99 at a cost of more than Rs. 90,000 subscribed by the residents in the District. A pillar, erected in 1253 to commemorate the victories of Sultān Nāsir-ud-dīn Mahmūd, was pulled down in 1862. In and about the town are several tombs of Muhammadan saints. Koil contains a general

hospital with 79 beds, and a female hospital with 18 beds, and the Lyall library, opened in 1889, is a handsome building. The civil station has been adorned by a magnificent clock tower and by a fine public hall opened in 1898. The chief want of the city hitherto was a satisfactory drainage scheme, as a large part of it was gradually built in swampy land round the fort, and the excavations from which earth was taken have become insanitary tanks. The outfall drains for sullage have now been completed.

The municipality of Aligarh-Koil was constituted in 1865, and during ten years ending 1901 the average income and expenditure have been Rs. 64,000. In 1903-04 the income was Rs. 95,000, chiefly derived from octroi, Rs. 81,000. Expenditure amounted to a lakh, including general administration, Rs. 9,000, public safety, Rs. 16,000, drainage, Rs. 22,000, and conservancy, Rs. 22,000.

Koil has a considerable export trade in grain, indigo, and cotton, but is not so important as Hāthras. It is, however, becoming to some extent a manufacturing centre. The Government postal workshop turns out numerous articles required by the department and includes a steam printing press, employing 220 men in 1903. There are three large lock factories employing more than 300 hands, and a number of smaller concerns. Three cotton gins and one press employed 285 workmen in 1903. The dairy farm at Chherat, a few miles away, was opened by Government, but is now privately owned and employs about 100 hands. There is also a small manufacture of inferior art pottery, and dried meat is prepared for export to Burma.

The municipality manages three schools and aids two others attended by 1,000 pupils. The District board maintains the District and *tahsili* schools with 287 and 175 pupils respectively, three branch schools with more than 300 pupils, and two girls' schools with 50. Aligarh is, however, chiefly celebrated for the Muhammadan Anglo-Oriental College. This institution owes its foundation to the labours of the late Sir Saiyid Ahmad Khān, K.C.S.I., to improve the condition of his co-religionists. He founded a society, called the Aligarh Institute, with the primary purpose of ascertaining the objections felt by the Musalman community to the ordinary education offered by Government.

In 1875 a school was opened, and was attended by 59 boys during the first year. Notwithstanding opposition and apathy, the movement progressed rapidly, and Sir Saiyid ultimately obtained support in all parts of India. The school was affiliated to the Calcutta University up to the First Arts standards in 1878, and up to the B. A. standard in 1881. It was subsequently affiliated to the Allahābād University, which was not founded till 1887. In 1904 there were 353 students in the school, 269 in the college, and 36 in the law classes; 76 of the total number were Hindus. Since the foundation-stone of the permanent buildings was laid in 1877 there have been large extensions. The college now includes 5 quadrangles of students' quarters, and also hires several houses for students, and it contains a magnificent hall and a hospital. The annual income and expenditure amount to about a lakh, and the Government grant is Rs. 18,000 annually. Students come from all parts of India, and even from Burma, Somaliland, Persia, Baluchistān, Arabia, Uganda, Mauritius, and Cape Colony. Between 1893 and 1902, the number of arts degrees taken by graduates of the Aligarh College was 24 per cent. of the total number conferred on Muhammadans in the whole of India. The Aligarh Institute society is extinct; but the Gazette, which was formerly issued by it, is now issued by the Honorary Secretary to the college.

Atrauli Town.—Municipality and headquarters of *tahsīl* of the same name, District Aligarh, United Provinces, situated in 20° 2' N. and 78° 18' E., on a metalled road from Aligarh. Population 16,561 (1901). The town was founded about the 12th century; but little is known of its early history. It was a centre of local disaffection during the Mutiny of 1857. The Muhammadan inhabitants, who are chiefly descended from converted Hindus, have always had a bad reputation for turbulence; and during the rebellion the town was in the hands of the insurgents from June till September 1857, when order was restored. The chief public buildings are the *tahsīlī*, which was once a fort, a town hall, dispensary, and school. Atrauli has been a municipality since 1865. In the ten years ending 1901 the average income and expenditure were Rs. 11,000. In 1903-04, the income was Rs. 17,000, chiefly derived from octroi, Rs. 13,000,

and expenditure Rs. 17,000. The trade is largely local and includes grain, sugar, cotton, cloth, and metals. There is one cotton gin which employed 192 hands in 1903. Four schools contain 600 pupils.

Harduāganj.—Town in *tahsīl* and District Aligarh, United Provinces, situated in 27° 56' N. and 78° 12' E., 6 miles east of Aligarh. Population 6,619 (1901). Tradition assigns the foundation to Har Deva and Balarāma, brothers of Krishna; but no ancient remains have been found. The Chauhān Rājputs say they settled here when Delhi was taken by the Musalmāns. In the 18th century Sābit Khān improved the town considerably. There is a good bazar, lined with brick-built shops, and the town contains a police-station, post-office, and school. It was formerly a municipality, but is now administered under Act XX of 1856 with an annual income of Rs. 1,450. The chief imports are salt, timber, and bamboos, and the chief exports cotton and grain. A cotton gin has been set up which employed 106 hands in 1903; and the town is rising in importance. The primary school has 90 pupils, and there are two girls' schools with 29.

Hāthras City.—Municipality and headquarters of *tahsīl* of the same name, District Aligarh, United Provinces, situated in 27° 36' N. and 78° 4' E. It lies on the roads from Muttra to the Ganges and from Agra to Aligarh, and also on the Cawnpore-Achhnerā Railway, and is connected with the East Indian Railway by a short branch. Distance by rail from Calcutta 857 miles, and from Bombay 890 miles. Population is increasing rapidly: 1872, 23,589; 1881, 34,932; 1891, 39,181; 1901, 42,578. In 1901 Hindus numbered 36,133 and Musalmāns 5,482. At annexation Hāthras was held by Dayā Rām, a Jāt of the same family as the Rājā of MURSAN. After the British annexation in 1803, the *talukdār* gave repeated proofs of an insubordinate spirit; and in 1817 the Government was compelled to send an expedition against him under the command of Major-General Marshall. Hāthras was then one of the strongest forts in upper India, the works having been carefully modelled on the improvements made in the fort at ALIGARH. After a short siege terminated by a heavy cannonade, a magazine within the fort blew up and destroyed

half the garrison. Dayā Rām himself made his escape under cover of the night, and the remainder of the native forces surrendered at discretion. During the Mutiny the town was kept tranquil by Chaube Ghanshām Dās, a blind pensioned *tahsildār*, who was afterwards murdered by the rebels at Kāsganj. The town is essentially a trading centre, and the site is crowded, though successive District Officers have done much to improve it. A project for improved drainage is under consideration, and it is also proposed to bring a water-supply from the Māt branch canal. The chief public buildings are the municipal hall and male and female dispensaries. The Church Missionary Society and Methodist Episcopal Mission have branches here.

Hāthras has been a municipality since 1865. The average income and expenditure in ten years ending 1901 were Rs. 34,000. In 1903-04 the income was Rs. 66,000, chiefly from octroi, Rs. 53,000. Expenditure amounted to Rs. 54,000. The board also had a closing balance of Rs. 26,000 and Rs. 31,000 invested.

Hāthras was a place of some importance, even before British rule, and it now ranks second to Cawnpore among the trading centres of the Doāb. There is a large export trade in both coarse and refined sugar. Grain of all sorts, oilseeds, cotton, and *ghī* form the other staples of outward trade; while the return items comprise iron, metal vessels, European and native cloth, drugs and spices, and miscellaneous wares. The town is becoming a considerable centre for industrial enterprise. It contains 6 cotton gins and 5 cotton presses, besides a spinning mill. These factories employed 1,074 hands daily in 1903. There are two schools with 300 pupils.

Jalālī.—Town in *tahsīl* and District Aligarh, United Provinces, situated in 27° 52' N. and 78° 16' E., 11 miles south-east of Aligarh. Population 8,830 (1901). The chief inhabitants are the Saiyids, Shias by sect. They are the descendants of one Kamāl-ud-dīn, who settled here about 1295 A.D. This Saiyid family subsequently expelled the old Pathān landholders, and obtained full proprietary rights in the town, which they still possess. The family has supplied many useful subordinate

officers to the British Government. The town contains a considerable number of *imāmbāras*, one of which is a handsome building. Jalālī is administered under Act XX of 1856, the annual income being about Rs. 1,700. There is a primary school with 60 pupils, and the Muhammadans maintain several schools for reading the Korān. The place has little trade.

Pilkhana.—Town in *tahsīl* Sikandra Rao, District Aligarh, United Provinces, situated in 27° 51' N. and 78° 17' E., 11 miles south-east of Aligarh. Population 5,109 (1901). The town is old and gave its name to a *taluka* farmed with Dayā Rām of Hāthras at the beginning of British rule. It is administered under Act XX of 1856 with an annual income of about Rs. 1,200. There is a primary school with about 60 pupils.

Sikandra Rao Town.—Municipality and headquarters of *tahsīl* of the same name, District Aligarh, United Provinces, situated in 27° 22' N. and 78° 24' E., on the Grand trunk road and on the Cawnpore-Achhnerā Railway. Population 11,372 (1901). The town was founded in the 15th century by Sikandar Lodī, and afterwards given as a *jāgīr* to Rao Khān, an Afghān, from which circumstances the double name is derived. During the Mutiny of 1857, Ghaus Khān, of Sikandra Rao, was one of the leading rebels, and held Koil or Aligarh as deputy for Walīdād Khān of Mālāgarh in the Bulandshahr District. Kundan Singh, a Pundir Rājput, did good service on the British side, and held the *pargana* as *nāzim*. Sikandra Rao is a squalid, poor-looking town, on a high mound surrounded by low, badly-drained environs. A great swamp spreads eastwards, attaining a length of 4 miles in the rains. There is a mosque dating from Akbar's time, and a ruined house in the town was once the residence of a Muhammadan governor. The public buildings include the *tahsīlī*, dispensary, and school. Sikandra Rao has been a municipality since 1865. In the 10 years ending 1901, the average income and expenditure were Rs. 8,000. The income in 1903-04 was Rs. 13,000, chiefly derived from octroi, Rs. 9,000, and the expenditure Rs. 14,000. The town is declining, and its trade is chiefly local. There is a small export of glass and saltpetre which are made in the neighbourhood. The middle school has 220 pupils, and 5 primary schools 270.

Cross-references (for Imperial Gazetteer only).

Baran.—Old name of BULANDSHAHR TOWN and TAHSIL.

Barot.—Town in *tahsil* Bāghpat, District Meerut, United Provinces, see BARAUT.

Burhānā.—*Tahsil* and town in Muzaffarnagar District, United Provinces. See BUDHANA.

Chhitāri or Chitāri.—Town in Bulandshahr District, United Provinces. See CHHATARI.

Jaunsār-Bāwar.—Name of a *pargana* which now forms the whole of the CHAKRATA *tahsil* in the Dehra Dūn District, United Provinces.

Koil.—The name of the headquarters municipality and *tahsil* in Aligarh District, United Provinces, usually called ALIGARH TOWN or TAHSIL in official correspondence.

Rūrki.—Sub-division, *tahsil* and town in Sahāranpur District, see ROORKEE.